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1
                 IN THE UNITED STATES DISTRICT COURT
                  FOR THE EASTERN DISTRICT OF TEXAS
 2
                           MARSHALL DIVISION
 3
    CONTENTGUARD HOLDINGS, INC. ) (
                                        Civil Docket No.
                                        2:13-CV-1112-JRG
                                   ) (
 4
                                   ) (
                                       MARSHALL, TEXAS
    VS.
                                   ) (
 5
                                   ) (
                                        NOVEMBER 19, 2015
                                   ) (
 6
    APPLE, INC.
                                   ) (
                                        8:39 a.m.
 7
                       TRANSCRIPT OF JURY TRIAL
 8
                 BEFORE THE HONORABLE RODNEY GILSTRAP
 9
                     UNITED STATES DISTRICT COURT
10
    APPEARANCES:
11
    FOR THE PLAINTIFF:
                              Mr. Samuel F. Baxter
                              Ms. Jennifer Truelove
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19
    APPEARANCES CONTINUED ON THE NEXT PAGE:
20
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                               SHELLY HOLMES, CSR, TCRR
                               Official Court Reporter
                              United States District Court
2.1
                              Eastern District of Texas
22
                              Marshall Division
                              100 E. Houston, Suite 125
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                              Marshall, Texas 75670
                               (903) 923 - 7464
24
    (Proceedings recorded by mechanical stenography, transcript
25
    produced on CAT system.)
```

1	APPEARANCES CONTINUED:
2	FOR THE DEFENDANT: Mr. David T. Pritikin Mr. Nathaniel C. Love SIDLEY AUSTIN LLP
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16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

```
1
                        PROCEEDINGS
 2
              (Jury out.)
              COURT SECURITY OFFICER: All rise.
 3
 4
              THE COURT: Be seated, please.
 5
              All right. Do the parties have items from the
 6
    list of pre-admitted exhibits to read into the record used
 7
    during yesterday's portion of the trial?
 8
              MS. ENGELMANN: Yes, Your Honor. Good morning.
 9
              Plaintiff's list of preadmitted used in -- used
10
    during yesterday's trial are as follows: AX-919C, 921C,
11
    923C, 1175C, and 1176C.
12
              THE COURT: Is there objection from the Defendant?
13
              MR. BRYAN ANDERSON: No objection, Your Honor.
14
              THE COURT: Do you have an additional list,
15
    Mr. Anderson?
16
              MR. BRYAN ANDERSON: We do, Your Honor.
17
              THE COURT: Please proceed.
18
              MR. BRYAN ANDERSON: AX-5, AX-6, AX-401, AX-502,
19
    AX-504, AX-508, AX-509, AX-515, AX-548, AX-919C, AX-921C,
20
    AX-923C, AX-1173, AX-1175C, AX-1176C, AX-1184, AX-1350.
21
              THE COURT: Any objection from the Plaintiff,
22
    Ms. Engelmann?
23
              MS. ENGELMANN: The only correction, Your Honor,
24
    would be the AX-1173, 1184, and 1350 will be filed as
25
    confidential with a C designation.
```

```
1
              THE COURT: Do you concur, Mr. Anderson?
 2
              MR. BRYAN ANDERSON: I do, Your Honor.
 3
              THE COURT: All right.
              All right. Mr. Pritikin, do you have something to
 4
 5
    raise?
 6
              MR. PRITIKIN: I do, Your Honor.
 7
              THE COURT: All right.
 8
              MR. PRITIKIN: We discussed in chambers this
9
    morning the procedure we're going to use with respect to the
10
    rsync and SSH materials, and the Court gave us guidelines,
11
    which obviously we're going to follow.
12
              I just wanted to put on the record that Apple does
13
    object to the introduction of the additional infringement
14
    evidence that is going to be offered on rebuttal by
15
    Dr. Goodrich and the -- and the fact, in addition, that
16
    we're not going to be permitted to refute this through
17
    Dr. Kelly beyond the one question that we will be asking
18
    him.
19
              But we understand what the Court's ruling is, and
20
    obviously we're prepared to follow that and will do so, Your
21
    Honor.
22
              THE COURT: All right. Your objection is noted.
23
              And while we're involved in making clear the
24
    record, the Plaintiff's filed motion for reconsideration of
25
    the Court's denial to admit the demonstrative identified as
```

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Bates No. APL-CG_01304517 that's set forth in Document 1044
 1
 2
    on file in this case is denied.
 3
              And Apple's request to present a surrebuttal case
    as filed in the record is also denied, as well as Apple's
 4
 5
    request to present additional direct testimony. That is
 6
    granted in part and denied in part as I've outlined with
 7
    counsel, and counsel understands. I think that should
 8
    clarify the record.
 9
              Dr. Prowse, if you're here, please return to the
10
    witness stand.
              And, Mr. Anderson, you're still in your direct
11
12
    examination, correct?
13
              MR. BRYAN ANDERSON: Yes, Your Honor.
14
              THE COURT: You may return to the podium.
15
              And, Mr. Nance, if you would, bring in the jury,
16
    please.
17
              COURT SECURITY OFFICER: All rise for the jury.
18
              (Jury in.)
19
              THE COURT: Please be seated, ladies and
20
    gentlemen. Welcome back.
21
              Just to bring you up-to-date, there were matters
22
    raised as objections at the time I sent you home yesterday
23
    afternoon. Those objections are overruled by the Court.
    We'll continue with the direct examination of Dr. Stephen
24
25
    Prowse by the Defendant.
```

```
1
              Mr. Anderson, you may continue with your direct
 2
    examination.
 3
              MR. BRYAN ANDERSON: Thank you, Your Honor.
    STEPHEN PROWSE, Ph.D., DEFENDANT'S WITNESS, PREVIOUSLY SWORN
 4
 5
                   DIRECT EXAMINATION (CONTINUED)
 6
    BY MR. BRYAN ANDERSON:
 7
         Dr. Prowse, will you please remind the jury why you are
 8
    here today to testify?
9
         Yes.
10
         I'm here to tell the jury my opinions with regards to
11
    my Georgia-Pacific analysis of a reasonable royalty that
12
    Apple would pay ContentGuard for use of its patents, should
13
    the jury find the patents valid and infringed.
14
         The jury has heard some discussion of the hypothetical
15
    negotiation. Can you please explain to them your
16
    application of that in this matter?
17
    Α
         Yes.
18
         The hypothetical negotiation is a part of the
19
    Georgia-Pacific analysis. It requires me, as a damages
20
    expert and economic expert, to assume the patents are valid
21
    and infringed and to assume that the parties come to an
22
    agreement about what a reasonable royalty would be for the
23
    patents that are asserted by the Plaintiff and that this
24
    negotiation takes place approximately around the beginning
```

of the first alleged infringement, which in this case would

25

- be sometime late in 2005. 1
- 2 Now, Dr. Prowse, you understand that Apple contests
- that it infringes any claims that are asserted here, 3
- 4 correct?
- 5 Yes. I -- I understand that Apple does not believe it
- 6 infringes.
- 7 It also contests that the claims asserted against it
- 8 are valid, correct?
- 9 Yes, I understand that, too.
- So for purposes of your analysis, you have to adopt a 10
- 11 fiction that there is an actual negotiation between the
- 12 parties where they assume they agree on infringement and
- 13 validity.
- 14 Is that a fair summary?
- 15 Yes, that is, yes.
- 16 MR. BRYAN ANDERSON: If we could pull up AX-923,
- 17 Mr. Simmons.
- 18 (By Mr. Bryan Anderson) This is the document we were
- 19 looking at yesterday at the end of your testimony.
- 20 Do you recall that, Dr. Prowse?
- 21 Yes, I do.
- 22 So do you recognize this AX-923 document?
- 23 Yes. This is a document I prepared in the course of my
- analysis and I included in my report. 24
- 25 What -- what information is reflected in this

- particular exhibit? 1 2 So this is my estimate of the costs of physical delivery of FairPlay updates to the FairPlay servers. 3 4 Was this information actually provided in the report 5 you submitted some months ago? 6 Yes, it was. 7 And where did you obtain the information that's reflected in this Exhibit AX-923? 8 9 I obtained this information from discussions with 10 Mr. Ward and Mr. Michael James, who are Apple employees, and 11 also from Mr. James' deposition. Why did you compile this information, Dr. Prowse? 12 13 So I compiled this information because I thought it was 14 a relevant data point that would be considered around the 15 time of the hypothetical negotiation. 16 And why was that, sir? 17 And that is because, at the time of the hypothetical 18 negotiation, I have to assume, as I've -- as I've said, that 19 the patents are valid and infringed, but I wanted to 20 understand, even assuming if ContentGuard's theories of
- negotiation, I have to assume, as I've -- as I've said, that
 the patents are valid and infringed, but I wanted to
 understand, even assuming if ContentGuard's theories of
 infringement are correct, was there a way for Apple to make
 FairPlay updates without using a secure connection, which I
 understood from a conversation with Dr. Kelly would not
 infringe the patents, even according to ContentGuard's
 theories.

```
1
              MR. BAXTER: And I object to that, Your Honor.
 2
    It's hearsay to begin with, and the same objection.
 3
              THE COURT: Response?
              MR. BRYAN ANDERSON: Your Honor, this is the basis
 4
 5
    in his report that's described for his understanding of the
 6
    non-infringing alternative of SSL that we discussed
 7
    vesterday.
 8
              MR. BAXTER: Just for the record, Your Honor, it's
    not based on sworn testimony.
9
10
              THE COURT: Well, as an expert, I think he's
11
    entitled to rely on hearsay. I'll overrule the objection.
12
         (By Mr. Bryan Anderson) Dr. Prowse, were you able to
13
    review the trial testimony of Mr. Ward in this case?
14
         I was.
15
         Were you able to review the trial testimony of
16
    Dr. Kelly in this case?
17
         I was -- parts of it, yes.
18
         Was that testimony consistent with the discussions you
19
    had with them on the ability of Apple to upload FairPlay
20
    software on to its servers without using a secure
21
    connection?
22
         Yes, it was.
23
         So what did you learn from your investigation as to the
24
    ability of Apple to upload FairPlay software without using a
25
    secure connection?
```

```
So I understood that this was -- from Dr. Kelly, that
 1
 2
    this was a feasible way to deliver FairPlay updates to
    FairPlay servers without using a secure connection.
 3
 4
              MR. BAXTER: Excuse me, Your Honor. Your Honor, I
 5
    mean, not to object again. Can I just have a running
 6
    objection to all his competing hearsay, Your Honor?
 7
              THE COURT: You may.
 8
              MR. BAXTER: Thank you, Your Honor.
              THE COURT: Same ruling.
9
              Let's continue.
10
11
              Go ahead and finish your answer, Dr. Prowse.
12
              THE WITNESS: Sure.
13
         So I understood from Dr. Kelly that it was
    physically -- it was feasible to deliver FairPlay updates to
14
15
    FairPlay servers without using a secure connection and that
    that would not infringe, even according to ContentGuard's
16
17
    theories.
18
         So my next investigation was to understand how much
19
    that would cost, what would it involve, and would it impact
20
    Apple's customers or the FairPlay system or Apple -- or the
21
    content owners that provide Apple with content in any
22
    material way.
23
              MR. BRYAN ANDERSON: Just to go back for a moment,
24
    Mr. Simmons, if you could pull up the trial testimony of
25
    Mr. Ward at Pages 92 through 93, Lines 25 through Line 13 on
```

```
93.
 1
 2
         (By Mr. Bryan Anderson) Is this the testimony that you
    were able to review from Mr. Ward that was consistent with
 3
    your conversations with him about the ability to not use a
 4
 5
    secure connection?
 6
         Yes. And his discussion about hand-delivering the
 7
    software, yes.
 8
              MR. BRYAN ANDERSON: Mr. Simmons, if we could pull
    up trial testimony from Dr. Kelly on Page 55, Lines 18
9
10
    through 21 -- Page 55, please.
11
              Thank you.
         (By Mr. Bryan Anderson) Is this the testimony you
12
13
    reviewed from Dr. Kelly that was consistent with your prior
14
    conversations that SSL was not a requirement for uploading
15
    FairPlay software?
16
        Yes, it is.
17
              MR. BRYAN ANDERSON: So let's go back to AX-923,
18
    please, Mr. Simmons.
19
         (By Mr. Bryan Anderson) Based on the information that
20
    you were able to obtain on your investigation, talking to
21
    Mr. James and Mr. Ward and Dr. Kelly, please explain to the
22
    jury how you compiled the information here and -- and what
23
    its significance is.
24
    A So one way of avoiding a secure connection is literally
25
    to -- my understanding is, put the update in a sealed bag
```

```
and physically transport it to the servers. And there are
 1
 2
    servers located in Newark, California, and in Maiden, North
    Carolina.
 3
         So my objective was to understand, well, what's the
 4
 5
    physical -- what are the actual costs of doing that
 6
    physical transportation of the FairPlay update to the
 7
    FairPlay server.
 8
         And I understood that -- from Mr. Ward, that there
9
    would be approximately updates needed to be made
    approximately twice a month, and it would cost -- obviously
10
11
    the travel costs, plus the cost of the software engineer's
12
    time to actually transport -- take the software to the
13
    servers.
         And so based on my analysis of compensation costs for
14
15
    software engineers and travel costs, I estimated the costs
16
    of physically transporting or physically delivering FairPlay
17
    updates to FairPlay servers over the entire life of the
18
    patents from 2005 all the way out to 2026.
         And what was -- I'm sorry, Dr. Prowse. And what was
19
20
    that cost?
21
         And that cost is in the bottom right-hand corner of the
22
    exhibit. It's approximately $2.2 million.
23
         And -- and what does this analysis you've undertaken on
24
    what it would cost Apple to not use the secure connection,
25
    what does that tell you for purposes of the hypothetical
```

1 negotiation? 2 Well, I think it's another relevant data point for purposes of a hypothetical negotiation, because at the 3 4 negotiation, the parties are going to assume the patents are 5 infringed and valid. 6 But if there are alternatives that Apple can enact to 7 avoid using a secure connection and those -- those 8 alternatives are not -- not very costly, as indicated by my 9 analysis here, and they don't impact materially customers or 10 content owners or the performance of FairPlay, then that 11 would be a very relevant piece of information for the 12 parties at the hypothetical negotiation and would influence 13 the amount that Apple would be willing to pay, assuming the 14 patents are valid and infringed, as a reasonable royalty. 15 Did Dr. Teece undertake such an analysis of -- of 16 alternatives in his report, Doctor? 17 He did not. 18 Is Dr. Teece's opinion that Apple would agree to pay a hundred plus million dollars as a reasonable royalty 19 20 consistent with this alternative? It's totally inconsistent, because if ContentGuard had 21 22 come with a demand for \$880 million at the hypothetical negotiation, Apple would have certainly considered and 23 24 presented evidence that would be around the fact that they 25 could avoid the use of a secure connection for much -- much

```
1
    less money.
 2
         In addition to looking at information about Apple, the
    financial information you talked about -- let's take a step
 3
 4
    back.
 5
         Let's remind the jury. What are the financial pieces
 6
    of information that you looked at from Apple that you've
 7
    described today and yesterday, sir?
 8
         So I think there's really three pieces of relevant data
9
    that would be relevant at the hypothetical negotiation.
    This data that I've just discussed, the 2.2 million, to
10
11
    avoid the use of using a secure connection; the $2.3 million
12
    that I talked about the -- yesterday with regards to the
13
    allocated portion of total FairPlay expenditures that can be
14
    allocated to the accused transactions; and the
15
    14-million-dollar Cloakware license, those are three
16
    relevant data points, I think, that would be considered at
17
    the hypothetical negotiation.
18
         In addition to looking at financial information
    available for Apple, did you look at anything from
19
20
    ContentGuard?
         Yes, I did.
21
22
         For example, what were the types of material you looked
23
    at from ContentGuard?
24
         Well, I looked at a number of ContentGuard internal
25
    valuations of a license to Apple.
```

```
1
              MR. BRYAN ANDERSON: Let's pull up AX-1252,
 2
    Mr. Simmons.
 3
         (By Mr. Bryan Anderson) Do you recognize this document,
 4
    Dr. Prowse?
 5
         Yes, I do.
 6
         Is this one of the documents you considered in your
 7
    analysis?
         Yes, it was.
 8
9
    Q.
         Okay.
10
              MR. BRYAN ANDERSON: If we can go to Bates 1514
11
    and blow that up, Mr. Simmons.
12
              Thank you very much.
13
         (By Mr. Bryan Anderson) Do you recall Mr. Baker's
14
    testimony about this subject?
         Yes, I do.
15
16
         Was this also one of the internal ContentGuard analyses
17
    you considered in your analysis?
18
         Yes, it was.
19
         What significance did you find in this 2005 analysis by
20
    ContentGuard?
21
         Well, firstly, it's -- it's an analysis done by
22
    ContentGuard in 2005, which is right around the time of the
23
    hypothetical negotiation.
24
         Secondly, it does have in it analysis of Apple,
25
    analysis of the market for digital content, and analysis on
```

```
1
    this page of a royalty rate applied to Apple.
 2
         What was the -- what would the royalty be in light of
    that royalty rate and the projected sales at the time?
 3
         Well, what this table tells you is that the envisioned
 4
 5
    royalty rate would be 10 cents per unit, and there were --
 6
    were estimated 160 million units in this analysis.
 7
         And this is basically iPods and video iPods that
 8
    they're looking at here, and the 10 cents multiplied by the
9
    160 million dollar -- 160 million units comes to
    $16 million.
10
11
         Now, did you hear Mr. Baker's explanation that this
12
    particular analysis would be limited to audio iPods?
13
         I did.
         Was that consistent with your understanding of the
14
15
    analysis here from 2005 based on your review of the
16
    document?
17
         Well, based on my review of the document and my -- and
18
    my knowledge of when the iPod video launched, these numbers
19
    would have -- or this analysis would have to have known that
20
    the iPod video had launched in -- earlier in 2005 and was
21
    being sold and was actually selling very well.
22
              MR. BRYAN ANDERSON: Would you please turn to
23
    1400, next page, 1400, Mr. Simmons.
24
              THE COURT: And, Mr. Anderson, if you'll speak up
25
    just a little bit.
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```
MR. BRYAN ANDERSON: Yes, Your Honor.
 1
 2
         (By Mr. Bryan Anderson) This is additional material
    from this 2005 analysis. Do you consider that in forming
 3
 4
    your opinions in this case?
 5
         I do.
 6
         What significance did you take out of this particular
 7
    slide in the 2005 ContentGuard analysis?
 8
         Well, this page of the -- of the document, which comes
9
    somewhat before the last page we just looked at, its first
10
    bullet point under significant recent market
11
    announcements/activities, specifically acknowledges what I
12
    was just talking about, that the Apple iPod video had just
13
    launched, had launched earlier that year. And it signals a
14
    broadening of deployment of DRM enabled content.
15
              MR. BRYAN ANDERSON: Let's take a look,
16
    Mr. Simmons, at AX-962.
17
         (By Mr. Bryan Anderson) Do you recognize this board
18
    presentation from 2008 by ContentGuard?
19
         Yes, I do.
20
         Is this one of the documents that you considered in
21
    your analysis?
22
         Yes, it is.
23
              MR. BRYAN ANDERSON: If we could turn to the
24
    Bates's page ending in 6159, Mr. Simmons. And -- and blow
25
    up this page.
```

```
(By Mr. Bryan Anderson) Is this a particular analysis
 1
 2
    that you considered in your -- in your analysis, Dr. Prowse?
         Yes, it is.
 3
         What significance did you take from -- from this
 4
 5
    particular 2008 analysis by ContentGuard concerning Apple?
 6
         Well, this, again, is an analysis of the valuation of a
 7
    license to Apple. It was the next one I noticed after the
 8
    one we just looked at in 2005.
9
         And it's relevant because it's a couple -- few years
10
    after the hypothetical negotiation, but it specifically
11
    looks at Apple and the -- the value of a license to Apple at
12
    that time.
13
         And what was the estimated license value for Apple in
14
    2008?
15
         Well, in the third bullet there, it says: Preliminary
16
    estimated license value believed to be approximately
    $30 million.
17
18
         Would the iPhone have been included in this analysis,
19
    to your understanding?
20
         Yes. The iPhone would have been included in this
21
    analysis because the iPhone had launched in 2007.
22
         Do you see the specific references to iPhone here, sir?
         Yes. In the table below, they have three Apple devices
23
24
    listed: The Mac -- that's the computer -- the iPod and the
```

25

iPhone.

```
The rates -- license rates that are in this table, are
 1
 2
    they consistent with Dr. Teece's analysis of a reasonable
    royalty based on his modeling?
 3
 4
         No. They're very inconsistent with Dr. Teece's rate,
 5
    which I believe was $1.75.
 6
         Now, in this particular 2008 analysis, we do see the
 7
    10 cents for the iPad.
 8
         Do you see that, sir?
9
         Yes. The iPad is still at 10 cents.
10
         They have a 20-cents rate for the iPhone. Do you see
11
    that?
12
         Yes, I see that.
13
         From an economic standpoint, do you have an opinion as
14
    to whether a royalty at a double rate on the iPhone for the
15
    five asserted patents in this case makes sense?
16
         From -- from an economic perspective, I don't believe
    it does make sense, no.
17
18
         Why is that, sir?
19
         Well, again, we want to go back to what the
20
    patents-in-suit here cover, and they cover a system for
21
    protecting content. They don't cover a device.
22
         And the system for protecting content would be the same
23
    for use for delivering content to the iPod as to the iPhone.
24
    And so it doesn't make sense to me that there's a higher
```

rate on an iPhone because the feature differences between an

25

```
iPhone and an iPod have nothing to do with the
 1
 2
    patents-in-suit and what they cover.
              MR. BRYAN ANDERSON: If you'll pull up AX-1102,
 3
 4
    Mr. Simmons.
 5
         (By Mr. Bryan Anderson) Did you consider in your
 6
    analysis and understanding of Apple's products this press
 7
    release about the iPod -- iPhone from January 9, 2009 (sic)?
 8
    Α
         Yes, I did.
9
              MR. BRYAN ANDERSON: If we could blow up the top
10
    paragraph, sir, Mr. Simmons.
11
         (By Mr. Bryan Anderson) Could you please explain to the
    jury how this description, if it does, influences you in
12
13
    your view as to the differential rate between an iPod and an
14
    iPhone?
15
         Yes. Well, this kind of illustrates what I was just
16
    talking about, the iPhone, which launched in January 2007,
17
    was basically described by Apple as combining three
18
    products: A revolutionary mobile phone, a widescreen iPod
19
    with touch scrolls, and a Breakthrough Internet
20
    Communications Device with desktop-class email, web
21
    browsing, searching and maps, into one small lightweight
22
    handheld device.
23
         So really -- if you're looking at the difference in
24
    features between the iPhone and the iPod, it's really in
    those -- in the first one that -- the first product that
25
```

```
Apple discusses there, a revolutionary mobile phone.
 1
 2
         And the third one, Breakthrough Internet Communications
    Device with desktop-class email, web browsing, searching,
 3
 4
    and maps, those are things that the iPod cannot do. But
 5
    those are also things that the patents-in-suit don't cover.
 6
         And so it doesn't make any sense to me that a rate
 7
    would differ or be higher for an iPhone than an iPod.
 8
         Turning back to the iPod, from an economic standpoint,
    does it make sense for you to apply a royalty rate to an
9
10
    iPod as opposed to content?
11
         Well, yes, this gets back to sort of my -- one of my
12
    base differences with Dr. Teece is I don't think it's
13
    appropriate to apply a device rate at all for these patents
14
    because, as we -- as I said, these patents cover a system
15
    for protecting content. They don't cover anything specific
16
    to the device.
         And so the various features of an iPod, widescreen,
17
18
    touch controls, that -- those sorts of things don't have
    anything to do with the patents-in-suit here.
19
20
         But this introduction to the iPhone from January 9,
21
    2009 (sic) doesn't specifically identify the App Store. Do
22
    you know whether the App Store came after the introduction
23
    of the iPhone?
24
         Yes, the App Store actually was launched after the
25
    launch of the iPhone.
```

```
1 Q And based on your investigation in this case, do you
```

- 2 have any view or opinion on the significance of apps in the
- 3 App Store to the success of the iPhone?
- 4 A Well, apps are a very important feature for the iPhone.
- 5 Lots of apps are downloaded on to the iPhone, lots of
- 6 different types of apps, such as Facebook, Twitter, ESPN,
- 7 ESPN app, Maps, entertainment apps, such as, Netflix and HBO
- 8 GO, those types of -- there's lots of different types of
- 9 apps that are used on iPhones.
- 10 Q And it's your understanding FairPlay DRM is used to
- 11 protect apps?
- 12 A Yes. As I said yesterday, the purchase and downloading
- 13 of apps on any Apple device is all -- is processed through
- 14 FairPlay.
- 15 Q And is it -- and FairPlay, is it accused in this case
- 16 for the use of protecting apps?
- 17 A No, no. Apps are not accused in this case.
- 18 Q Now, in your -- does -- Dr. Teece's analysis, is that
- 19 consistent with your understanding -- well, let me take a
- 20 step back.
- 21 You understand that Dr. Teece applies a device royalty
- 22 | rate of \$1.75 to every iPhone that is accused in this case,
- 23 correct?
- 24 A I do.
- 25 Q Is Dr. Teece's application of a device royalty, for

- 1 example, to iPhones, consistent with your understanding of
- 2 | the economic value of the patents-in-suit to such a device?
- 3 A No, it's not.
- 4 Q Why not?
- 5 A Well, basically one reason is because very, very little
- 6 | accused content -- digital TV shows, books, or movies -- is
- 7 actually downloaded on to an iPhone.
- 8 Q How much, sir, based on your analysis?
- 9 A Based on my analysis, for all the accused iPhones that
- 10 Dr. Teece calculates royalty on, on average, less than
- 11 one-third of a unit of digital content is downloaded on to
- 12 | an iPhone; in other words, less than one-third of a book or
- 13 less than one-third of a movie or less than one-third of a
- 14 TV show. So the accused content is not used very much on
- 15 iPhones.
- 16 Q How much of Dr. Teece's device royalty in total is
- 17 based on the iPhone, sir?
- 18 A Well, if you -- if you look at his table, half of his
- 19 device royalties are attributed to the iPhone.
- 20 Q In your review of Dr. Teece's analysis, did he concede
- 21 | that there are technologies unrelated to the patents-in-suit
- 22 | that are used in an iPhone?
- 23 A Oh, yes. He -- he recognized the fact that there are
- 24 | lots of different technologies used in an iPhone that don't
- 25 | have anything to do with what the patents-in-suit here

```
1
    cover, such as --
 2
         Give us some examples. Thank you.
         -- such as processing speed, broadband compression,
 3
    which enables you to bring digital content on to your phone,
 4
 5
    high-resolution screens, all sorts of those -- those types
 6
    of technologies that are available and delivered on an
 7
    iPhone don't have anything to do with the patents-in-suit in
    this matter.
 8
9
              MR. BRYAN ANDERSON: Mr. Simmons, could you pull
10
    up ADX-12.4?
11
         (By Mr. Bryan Anderson) So, Dr. Prowse, would you
12
    summarize for the jury what significance your internal --
13
    your analysis of ContentGuard's internal valuation of an
14
    Apple license were in your opinions here?
15
         Yes.
16
         So as I talked about a little earlier, I think the 2005
17
    ContentGuard value of an Apple deal and the 2008
18
    ContentGuard value of an Apple deal are relevant data points
19
    that should be considered to determine what the reasonable
20
    royalty should be at the hypothetical negotiation.
21
         Now, they're for all of Apple's -- they're for --
22
    sorry -- they're for all of ContentGuard's patents, not just
23
    the five patents-in-suit here, and there's -- I have a
24
    problem with the 2008 analysis, as we discussed, because I
25
    think it captures a little too much value of the -- for the
```

```
iPhone. But those are -- but those still are relevant data
 1
 2
    points to consider at the hypothetical negotiation.
         And the second point I draw from this chart is that
 3
    they are absolutely inconsistent with Dr. Teece's analysis.
 4
 5
         Were there other internal valuations by ContentGuard
 6
    that you reviewed in your analysis of a reasonable royalty,
 7
    other than the two we've discussed?
 8
         Yes, there were.
9
         Did you find those analyses significant as -- as these
10
    two?
11
         No, I didn't.
12
         Why not?
13
         Well, generally, they were later in time. And while
14
    some were -- while some had actually lower values in terms
15
    of rates that we've looked at here, others had much higher
16
    values.
17
         And so I think they were further away from the
18
    hypothetical negotiation, and I also think they -- some of
19
    them suffered from the same problem we just discussed here,
20
    which is they were trying to capture value attributed to
21
    iPhones and tablets that really didn't have anything to do
22
    with the patents-in-suit here.
23
              MR. BRYAN ANDERSON: Your Honor, I'm going to go
24
    into a number of ContentGuard's licenses now, which requires
25
    sealing of the court.
```

```
THE COURT: All right. At the request of Counsel,
 1
 2
    the Court will order the courtroom sealed. If you're
    present and not subject to the current protective order in
 3
    this case, you should excuse yourselves until the courtroom
 4
 5
    is unsealed.
 6
              (Courtroom sealed, in a separate volume, Page 3,
 7
              Line 3 through Page 38, Line 23.)
 8
              (Courtroom unsealed.)
 9
              THE COURT: Mr. Nance, you may open the doors and
10
    allow the public to return.
11
              Members of the jury, if you'll leave your
12
    notebooks in your chairs and not discuss the case among
13
    yourselves. Use this opportunity to get a drink of water,
    stretch your legs. We'll be back shortly and continue.
14
15
              But with those instructions, you are excused for
16
    recess at this time.
17
              (Jury out.)
18
              MR. BRYAN ANDERSON: May Dr. Prowse be released,
19
    Your Honor? I forgot to ask that.
20
              THE COURT: Any objection from the Plaintiff?
21
              MR. BAXTER: No, Your Honor.
22
              THE COURT: Dr. Prowse is released.
23
              We'll take about 10 or 12 minutes.
24
              MR. PRITIKIN: Well, Your Honor, under the
25
    quidelines and the constraints that we can ask Kelly just
```

```
the one question in the five minutes that we have with Ward
 1
 2
    and that we're not allowed to ask him about a digital
    certificate --
 3
 4
              THE COURT: You told me that you could deal with
 5
    Mr. Ward in five minutes. That's where the five minutes
 6
    came from. What is your number?
 7
              MR. PRITIKIN: I just want to say this, Your
 8
    Honor: I would like -- could we have about a half-hour? We
9
    may not call them, and that obviously is going to save some
    time. I don't -- we only have one other witness left after
10
11
    that, but I'd like a chance to just talk to my team about
12
    where we're going, and I can advise the Court as to what
13
    we're going to do then.
              THE COURT: We'll take 15 minutes, and then I'll
14
15
    see you and see where you are.
16
              MR. PRITIKIN: You want us -- to see us in
    chambers then, Your Honor?
17
18
              THE COURT: I'll -- I'll locate you one way or the
19
    other. Take 15 minutes, and we'll see where we are.
20
              MR. PRITIKIN: I appreciate that. Thanks.
21
              THE COURT: The Court stands in recess.
22
              (Recess.)
23
              (Jury out.)
24
              COURT SECURITY OFFICER: All rise.
25
              THE COURT: Be seated, please.
```

```
All right. Mr. Pritikin, it's my understanding
 1
 2
    that despite our discussion in chambers this morning with
 3
    regard to recalling Mr. Ward and Dr. Kelly, you've decided
 4
    to rest at this point?
 5
              MR. PRITIKIN: That is correct, Your Honor. Apple
 6
    rests.
 7
              THE COURT: All right. We'll get that on the
 8
    record once I bring the jury in.
 9
              Mr. Thomas, are you going to present the rebuttal
10
    case for the Plaintiff?
11
              MR. THOMAS: Yes, I will, Your Honor. It will be
12
    just Dr. Goodrich.
13
              THE COURT: And it will be, as we have discussed,
14
    the same quidelines.
15
              MR. THOMAS: I have talked to Dr. Goodrich, and he
16
    understands those guidelines, Your Honor.
17
              THE COURT: All right. Then let's bring in the
18
    jury, Mr. Nance.
19
              COURT SECURITY OFFICER: All rise for the jury.
20
              (Jury in.)
21
              THE COURT: Please be seated.
22
              All right. Defendant, call your next witness.
23
              MR. PRITIKIN: Your Honor, Apple rests at this
24
    time.
25
              THE COURT: All right. The Defendant having
```

```
1
    rested its case, does the Plaintiff have a rebuttal case to
 2
    present?
 3
              MR. THOMAS: Yes, we do, Your Honor. In rebuttal,
    Plaintiff calls back to the stand Dr. Michael Goodrich.
 4
 5
              THE COURT: All right. Dr. Goodrich, if you'll
 6
    return to the witness stand. I remind you, you remain under
 7
    oath.
 8
              THE WITNESS: Thank you, Your Honor.
9
              THE COURT: Mr. Thomas, you may go to the podium.
              All right. Counsel, you may proceed.
10
11
           MICHAEL GOODRICH, Ph.D., PLAINTIFF'S WITNESS,
12
                          PREVIOUSLY SWORN
13
                          DIRECT EXAMINATION
    BY MR. THOMAS:
14
15
         Good morning, Dr. Goodrich.
16
         Good morning.
17
         Dr. Goodrich, you were here to listen to the testimony,
18
    I believe, of Dr. Kelly, correct?
19
         Yes, sir.
    Α
20
         And, again, if you could just reprise for us what your
21
    role in this case is, just very briefly?
22
         So my role is to provide expert opinion with respect to
23
    infringement of the Apple products, as well as to also be
24
    rebutting the arguments with respect to invalidity.
25
         Now, you heard what Dr. Kelly said about his
```

```
disagreement with your opinions with respect to
 1
 2
    infringement; is that correct?
 3
         Yes, sir, I heard that.
 4
         And do you have responses to those -- those criticisms?
 5
         Yes, sir.
 6
         So what are we looking at here, sir?
 7
         This is a summary of my opinions that I provided last
 8
    week during my direct testimony, and reiterates that now,
9
    after hearing all the testimony that occurred in the court,
    I -- I still have these same conclusions with respect to
10
11
    usage rights and trusted devices.
              MR. THOMAS: Mr. Diaz, if you could please pull up
12
13
    the Court's definition for usage rights from the sheet
    that's in the jurors' notebooks. And if you could highlight
14
15
    that for us.
16
         (By Mr. Thomas) Now, do you recall, sir, that this is
17
    the definition that the Court has given us for what "usage
18
    rights" means in the claims of the patents that we're
19
    asserting in this case, correct?
20
         Yes, sir.
21
         Okay. Now, sir, do you see any requirement anywhere in
22
    this definition for permanent attachment of the usage rights
23
    to the content?
24
         No, sir.
```

Has there been -- is there anything in this trial where

25

```
1
    this question of permanent attachment has been addressed by
 2
    Judge Gilstrap?
 3
         I haven't heard anything during this trial about
    permanent attachment.
 4
 5
         But permanent attachment, you know Judge Gilstrap has
 6
    ruled, is not a requirement --
 7
              MR. PRITIKIN: May we approach, Your Honor?
 8
              THE COURT: You may.
9
              (Bench conference.) ++CHECK
              MR. PRITIKIN: That last statement violates the
10
11
    Court's orders. We are not permitted to talk about --
              THE COURT: It does, Mr. Thomas. The order in the
12
13
    claim construction recites that you're not to discuss
14
    anything before the jury other than the actual
15
    constructions.
16
              The language in the order does not require a
17
    permanent attachment, is not part of the construction. It's
18
    a part of the analysis and the fuller explanation contained
19
    within the order.
20
              MR. THOMAS: All right.
21
              THE COURT: I'll sustain the objection.
22
              MR. THOMAS: That's fine.
23
              MR. PRITIKIN: I think the jury should be
24
    instructed, Your Honor, that that is not part of the Court's
25
    construction.
```

```
1
              THE COURT: No, I'm not going to do that, because
 2
    it is in my order, but --
 3
              MR. PRITIKIN: We've been very careful not to say
    that you have ruled that a mere association is not enough,
 4
 5
    that a -- a mere reference is not enough. We've been very
 6
    careful just to ask --
 7
              THE COURT: You objected; I sustained it, just
    like this one.
 8
 9
              MR. PRITIKIN: But now they've gone beyond that,
10
    and they've said that -- that this is an explicit part of
11
    the Court's construction ++.
12
              THE COURT: The answer -- the question hasn't been
13
    answered. I'm going to sustain the objection. And my
14
    instructions to the jury have been all along when the
15
    objection has been sustained they're to disregard the
16
    question ++.
17
              MR. PRITIKIN: All right.
18
              THE COURT: Let's move on.
19
              MR. PRITIKIN: Thank you.
20
              (Bench conference concluded.)
21
              THE COURT: All right. I sustained the objection.
22
              Ask your next question, Counsel.
23
         (By Mr. Thomas) The word "permanent" doesn't appear in
    this claim construction, does it, this definition?
24
25
    Α
         No, sir.
```

```
1
         Okay. And you see here where we've got the expression
 2
    "attached or treated as attached" in that construction?
 3
         Yes, sir, I saw.
              MR. THOMAS: If we could go back to that,
 4
 5
    Mr. Diaz, that same -- pull out -- and then where it says
 6
    "attached or treated as attached."
 7
         (By Mr. Thomas) And were you here yesterday to hear
 8
    Dr. Kelly say that he thinks that attached, comma, or
9
    treated as attached, comma, that they mean the same thing;
10
    they don't have any difference between them, that he's
11
    applying? Did you hear that?
12
         Yes, sir, I heard that.
13
         Do you think that's a reasonable way to apply this
14
    definition?
15
         No, sir.
    Α
16
         Why not?
17
         Because the Court has given us this definition of
18
    "attached or treated as attached" to distinguish these two
19
    concepts; that attached, for example, could mean that the
20
    content has to travel together with the usage rights;
21
    therefore, treated as attached has got to mean something
22
    else; that in this case, the content doesn't have to always
23
    travel with the usage rights, as long as the usage rights
24
    are treated as attached by the enforcement software on the
25
    repository.
```

```
And is there anything in this definition of usage
 1
 2
    rights that says that the usage rights have to travel with
    the content to get to the customer's device?
 3
         No, sir.
 4
    Α
 5
         Now, with respect to --
 6
              MR. THOMAS: If I could go back to Slide --
 7
    Slide 1 that we had up here before, please, Mr. Diaz.
 8
         (By Mr. Thomas) With respect to whether or not there's
9
    an indication of manners of use and any conditions of use,
10
    what do you say with respect to whether or not that does,
11
    indeed, exist in Apple's accused system?
12
         Yes, sir. I still conclude that it does exist.
13
         Okay.
14
              MR. THOMAS: If I could go to the next slide,
15
    please?
16
         (By Mr. Thomas) What is this that we're looking at,
17
    Dr. Goodrich?
18
         So this is a slide from my testimony last week that's
19
    talking about this "isRental" field. And as I heard
    Dr. Kelly say, he was saying that I'm identifying the "kind"
20
21
    field and the "isRental" field as the usage rights in the
22
    Apple system. But that's actually not accurate.
23
         Instead, what I'm saying is that it's all the
24
    information that is to be enforcing usage rights that's
25
    coming down in that purchase response.
```

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And that includes the "isRental" field as an indication when you have the right to rent a movie and watch a rental movie and that "kind" field, which says that you have information about the kind of content that you can play. But here on this slide last week, which is unchanged, I identified that, indeed, it is this information with respect to these rental conditions that is being enforced by FairPlay from the Rentalbag. And as we heard in court, those values are the same values, that 30-day time limit, the 24-hour time limit you have once you start watching, that is coming down in the purchase response. MR. THOMAS: And if I could go to the next slide, please. (By Mr. Thomas) And what did you tell us and how has your analysis changed at all by what Dr. Kelly said with respect to how the "kind" field and the "explicit" and "rating conditions" are indications of manners of uses? So I -- I still conclude that the "kind" field is still this indication. It's telling us, as an indication, the code -- like in that Figure 10 that I showed from the Stefik patents in yellow, green, and orange, this would be that yellow part -- the code that is telling us this indication of the manner of use that's indicating in this case that the user would have the right to watch a movie, watch a TV show,

1 or view a book. 2 And I heard people in court saying that this is not enforced by FairPlay, and it's not. I agree with that. 3 4 Instead, what we're saying -- what I'm concluding, 5 based on how both iTunes, together with FairPlay work, is 6 that they work in concert. And in this case, the iTunes 7 code -- the iTunes software on the iPhone, iPad, or other 8 computer that's -- that's running this software is going to 9 be using this "kind" field to only present to the users the movies and books that they're allowed to watch. 10 11 And, therefore, it's enforcing a usage right, together 12 with these conditions about parental controls of "explicit" 13 or "ratings" that they would only be showing things that 14 the -- the user's allowed to watch. 15 Therefore, it's controlling what they can watch. It's 16 only showing things that they are allowed to watch. 17 MR. THOMAS: Can I go to the next slide, please? (By Mr. Thomas) And if you could, remind us what you 18 19 told us in your earlier deposition -- I mean, your earlier 20 testimony --21 MR. THOMAS: Let me strike that. 22 (By Mr. Thomas) Did anything that Dr. Kelly had to say 23 in his testimony convince you that the conditions and the 24 manners of uses and the indications thereof are not attached 25 or treated as attached to the digital content in Apple's

```
1
    system?
 2
         No, sir. All these conclusions that I had from before
    still hold.
 3
 4
         And why is it? What is it that you pointed to and are
 5
    you relying on to establish that the repositories treat the
    indications of the manners of use and the conditions as
 6
 7
    being attached to the digital content?
 8
         So what I'm showing here -- again, just to -- to remind
9
    on the right the parts that I discussed last week -- is this
10
    conclusion that usage rights in the Apple system are treated
11
    as attached to the content.
12
         And I'm not trying to opine that they're attached, that
13
    they always have to travel together or always be stored
    together. Instead, I'm concluding that they're treated as
14
15
    attached because it's that enforcement software, the iTunes
16
    and FairPlay on the Apple device, that is treating as
17
    attached these usage rights to the content through all these
18
    four different ways, that there's an identifier, and that
19
    AdamID that identifies the movie or the book.
20
         There's the links of the URL that links to the content
21
    that you can then have sent to you through the Akamai
22
    content delivery network. There's that decryption key that
23
    we heard about, that content key in the SINF, that allows
24
    you to decrypt the content that was encrypted.
```

And then finally, once these usage rights are stored on

```
the device, there's this link that links up the usage rights
 1
 2
    information that came down in the purchase response and now
    is being stored in that media library. That links that up
 3
 4
    with where that content file and that content key are being
 5
    stored on the device.
         Do you recall hearing Dr. Kelly explain his view of why
 6
 7
    there's no physical integrity in the accused Apple devices
 8
    and system?
9
         Yes, sir, I do.
         Did that make you change any of your opinions with
10
11
    respect to whether there is, indeed, physical integrity
12
    being maintained as part of the repositories that Apple uses
13
    in its system?
14
         No, sir.
15
              MR. THOMAS: If I could go to the next slide.
         (By Mr. Thomas) If you could, remind us, sir, why --
16
17
    what is it that you were pointing to that comprises this
18
    physical integrity?
19
              MR. THOMAS: But before I do that, Mr. Diaz, can I
20
    please have up the Court's definition of physical integrity?
21
         (By Mr. Thomas) Now, you see this definition, sir,
22
    where it says: Preventing access to information in a
23
    repository by a non-trusted system?
24
         Yes, sir.
25
         Does that definition require any particular way to
```

```
1
    prevent access to information in a non-trusted system?
 2
         No, sir.
 3
    Q
         Okay.
              MR. THOMAS: And if I could go back to Slide 6.
 4
         (By Mr. Thomas) And if you could, please explain to us
 5
 6
    what it is that you found that you believe prevents access
    to information in a non-trusted system in the Apple devices.
 7
 8
         So this is a replay of a slide that I -- I gave last
9
    week as a part of my direct testimony. And all these
    conclusions still hold.
10
11
         Digital content is stored encrypted with content keys.
12
    The content keys are protected in SINFs, these security
13
    information. These SINFs are encrypted with the account
14
    keys or -- and then -- or the rental keys.
15
         And then these account keys are protected and encrypted
16
    in Keybags and Rentalbags. And then this protection is
    being provided by a combination of a number of different
17
18
    techniques.
19
         There's the hardware on things like the iPhone and the
20
    iPad that have special kind of protections and hardware, but
21
    on, say, a PC and a Mac, as we heard, there's this process
22
    of Cloakware or obfuscation that's hiding the keys on these
23
    devices and providing physical integrity through the use of
24
    software.
25
         Now, sir, we've heard a lot of discussion in this case
```

```
1
    about secure containers.
 2
         Do you recall that?
 3
         Yes, sir.
 4
         Does Apple actually use what it's been calling the
 5
    secure container approach for any particular kind of content
 6
    that it sells through the iTunes Store currently?
 7
         Yes, sir, I believe they do.
 8
         And what is it that they use the secure container
9
    approach for?
10
         They use the secure container approach for this
11
    DRM-free music, because as I talked about last week,
12
    DRM-free music is sent encrypted, just like you need for
13
    secure container.
         A decryption key is sent to the customer's device that
14
15
    permanently decrypts that music, and then once it's
16
    permanently decrypted, that music is no longer under DRM
17
    control.
         So this would be what in those documents was -- would
18
19
    be calling the secure container approach.
20
         And is that how Apple treats and sells and rents
21
    movies, books, and TV shows that it protects with digital
22
    rights management?
23
         No, sir, it doesn't.
24
         What's the difference?
25
         So the difference -- if you -- if you go back to those
```

documents that we were shown in court with respect to the secure container definition, what we see is that the definition of a secure container is this -- what I've just highlighted here with these three bullets.

The content is sent encrypted, a decryption key is then sent, and then that content is permanently decrypted for all times.

Dr. Kelly, in his testimony, said that he saw this word "basic methods" when -- in that passage that talked about secure container. And he interpreted that word "basic" to mean simple and that now Apple is doing a more complicated version of the secure container because they add the Cloakware to the secure container approach.

"basic" in that passage because that passage is also referring to the trusted system report -- approach and including in that trusted system, in a broad generalization, this method that we heard about from Dr. White the Dyad method and the ABYSS method where they built that computer, they had that big hardware in there that you had to shove in.

And all those kind of things that it talked about in respect to that trusted system with that extra hardware that would be hard to fit in a Mac because it wouldn't be compatible, all those things that they were saying were bad

```
about a trusted system, were also saying something was
 1
 2
    fairly complicated.
 3
         So that word "basic" really is talking about some
    things -- that there's two fundamentally different ways:
 4
 5
    Secure container, which is here, how they do DRM-free music;
 6
    and the trusted system approach, which is, for example, how
 7
    the Stefik patents work.
 8
    0
        Now, sir --
9
              MR. THOMAS: If I could pull up the definition of
    "communications integrity," please, Mr. Diaz.
10
11
         (By Mr. Thomas) In the communications integrity
12
    definition, sir, it says: Only communicates with other
    devices that are able to present proof that they are trusted
13
    systems, for example, by using security measures such as
14
15
    encryption, exchange of digital certificates, and nonces.
16
         Do you see that, sir?
17
         Yes, sir.
18
         Now, what's your conclusion with respect to whether or
19
    not the Apple system for selling books, movies, and TV shows
20
    through its DRM system meets this definition of
21
    communications integrity?
22
         I still conclude that it satisfies this definition of
23
    communications integrity when it's talking between those
24
    store servers and the customer devices.
25
              MR. THOMAS: Could I have Slide 8, please,
```

```
Mr. Diaz?
 1
 2
         (By Mr. Thomas) And if you could, tell us, sir, what is
    it that you were relying on to establish that there's this
 3
 4
    communications integrity?
 5
         So what I was relying on is this deposition testimony
 6
    from Mr. Ward that identifies that when the customer devices
 7
    and the iTunes Stores are communicating with each other,
 8
    they use this Secure Socket Layer, SSL protocol we've been
9
    hearing about, to protect that communication, to encrypt it,
10
    to make sure that both sides know that this is something
11
    that they can trust as a way of communicating with each
12
    other.
13
        Now, does this SSL, this Secure Socket Layer protocol
14
    and software -- can it also be used to provide behavioral
15
    integrity in Dr. Stefik's patented systems?
16
         Yes, sir. It just depends on who you're talking to.
17
    If it's a device talking to a store, it can be used for
18
    communications integrity. If it's a software installer
19
    talking to a server, it could be used for behavioral
20
    integrity.
21
         Now, what are we showing on this slide? What are you
22
    showing here, Dr. -- Dr. Goodrich?
23
         Well, there was some discussion that I heard during the
24
    trial about how Akamai servers would have to be repositories
25
    and -- under the Stefik approach to DRM. And that is
```

```
actually not the case, because Akamai is just a content
 1
 2
    delivery network. That's what CDN stands for.
         And sent -- and we already know from depositions and
 3
    what we've heard in court that usage rights travel to the
 4
 5
    devices from the iTunes Stores. We know that content is
 6
    delivered to the devices because it originally comes from
 7
    the iTunes Stores, is sent through this Akamai content
 8
    delivery network, and then finally arrives at the devices.
9
         And so, moreover, we also know that those content
    files, those protected movies, books and TV shows, when they
10
11
    are sent, they are sent as encrypted files.
         And so it's satisfying this communications integrity
12
13
    because they're using encryption to communicate from the
14
    store to the device through the Akamai content delivery
15
    network.
16
         So the content delivery network is not a repository.
17
    In fact, they showed this funny picture of me admitting to
18
    that, because it's true. It doesn't have to be a
    repository, because the content is being sent encrypted.
19
20
              MR. THOMAS: Mr. Diaz, may I please have up the
21
    testimony of Mr. Fasoli from November 17th in the afternoon,
22
    Page 6, Lines 11 to 16.
23
         (By Mr. Thomas) Do you recall when I asked Mr. Fasoli
24
    the following question: Now, as far as FairPlay is
25
    concerned, FairPlay is -- has -- from FairPlay -- from
```

```
FairPlay's point of view, Akamai is not relevant to how
 1
 2
    Apple's DRM system protects content; isn't that true?
         And his answer was: That is correct. We only use it
 3
    to store the distribution copies of the movies.
 4
 5
         Is that consistent with what your view of the Akamai
 6
    content delivery system is as it relates to the accused
    Apple systems in this case?
 7
 8
         Yes, sir. That's -- that's consistent with my
9
    understanding of how Akamai is used, what role it plays, and
10
    also is something that I recollect as well from Mr. Ward
11
    saying that.
12
         This -- Mr. Fasoli?
13
         I mean Mr. Fasoli. I'm sorry.
14
         Mr. Fasoli was Apple's engineer, the first one we heard
15
    from in this case.
16
         Do you recall that?
17
         Yes, sir. I'm sorry. I just misspoke.
18
              MR. THOMAS: Now, can I have up the --
19
         (By Mr. Thomas) You heard Dr. Kelly also discussing
20
    behavioral integrity, and his conclusion that behavioral
21
    integrity wasn't being practiced in the Apple system.
22
         Yes, sir.
23
         Did any -- did any of his testimony change your mind on
24
    that?
25
         No, sir, it did not.
```

```
What do you say, sir, with respect to -- with respect
 1
 2
    to whether there is behavioral integrity in Apple's system
    on the customer devices?
 3
         I conclude that there still is behavioral integrity on
 4
 5
    the customer devices.
 6
         And for what reason?
 7
         Because if we recall back to the definition of
 8
    behavioral integrity, as I recall, it's requiring software
9
    to include a digital certificate in order to be installed in
10
    a repository.
11
         And we have to understand that word "include" from the
12
    perspective of somebody of ordinary skill when they're
13
    reading the patents and understanding the Court's
14
    definition, that it's not that this digital certificate has
15
    to be jammed into the software and be a part of the
16
    software.
         If I could, by way of analogy, explain what this is --
17
18
    and how that would be understood, it's -- it's the same
19
    policy that my wife and I have when it comes to Christmas
20
    presents. We have a policy -- and if I could borrow the
21
    Court's language a little bit -- it's requiring electronic
22
    toys to include batteries in order to be installed under the
23
    Christmas tree.
24
         And it's not that those toys have the batteries as a
25
    part of the toy; it's that they're included in the box that
```

```
comes with the toy. And, in fact, in some years, we had to
 1
 2
    tape the battery next to the box in order to satisfy our
 3
    rule.
 4
         The point is that as long as a part of the -- the
 5
    process that installs the software requires as a part of
 6
    that process that there has to be a digital certificate
 7
    included in that process and the purpose of which is to make
 8
    sure that the recipient of that software knows that it's
9
    coming from a trusted source, in this case, Apple, then it
10
    would be satisfying this definition of behavioral integrity.
11
         Now, sir, what about for the iTunes -- the servers in
12
    the iTunes Store? What was -- what is your conclusion with
13
    respect to behavioral integrity as being practiced there and
14
    whether that behavioral integrity -- that requirement for
15
    behavioral integrity is literally met by what's happening in
16
    Apple's system?
         So what I concluded before -- I'm not showing it on
17
18
    this slide, but what I included before was this discussion
19
    about how, if you're sending software using this SSH
20
    protocol to update an iTunes Store server, then it would be
21
    satisfying the construction for behavioral integrity.
22
         And then what I'm showing on -- on this slide is
23
    that -- how that -- that same analysis with respect to SSH
24
    also applies to the FairPlay DRM servers.
25
         In particular, when those are being updated using this
```

```
rsync protocol over SSH, which is how I understood is being
 1
 2
    done based on what -- from my studies and understanding,
    that when that SSH protocol is set up, the way that that --
 3
    that occurs is the one of -- the first kind of messages that
 4
 5
    is sent back and forth is -- is a signed message where
 6
    inside that message is identifying information about the
 7
    entity that is proposing this SSH connection.
 8
         So in this picture, it would be the server team who is
9
    setting up this connection. They would put in as their
10
    identifying information their user name -- that's the system
11
    administrator user's name -- digitally signing that, and
12
    sending that over as a part of this installation process.
13
    Hence, the thing that's being sent over is a digital
14
    certificate by the Court's definition.
15
              MR. THOMAS: Mr. Diaz, if we may please have the
16
    Court's definition of "digital certificate."
         (By Mr. Thomas) So we have up here the Court's
17
18
    definition of digital certificate, Dr. Goodrich. It says:
19
    A signed digital message that attests to the identity of the
20
    possessor.
         And how does this rsync over SSH accomplish that
21
22
    definition?
                 If you could explain that to us, just briefly.
23
         Certainly.
24
         So the idea is that when that message goes across to
25
    set up the connection, it is including in there a signed
```

```
1
    digital message that attests to the identity of the
 2
    possessor because it's literally a digital signature on
    their user name that's being sent.
 3
         Now, I think the confusion might be that this is not
 4
 5
    what is commonly referred to as a digital certificate by
 6
    modern computer scientists. Modern computer scientists, we
 7
    have a -- a standard that we call X.509, and digital
 8
    certificates have to be in that standard nowadays for us to
9
    call it a digital certificate.
         But the Court's definition for digital certificate
10
11
    didn't say it had to be an X.509 certificate. It just had
12
    to be a signed digital message that attests to the identity
13
    of the possessor.
14
         And that's what happens in that SSH protocol when you
15
    sign your user name and send it over. It's literally a
16
    signed digital message attesting to the identity of the
17
    possessor of the software who's now doing that installation.
18
         So is an X.509 certificate just one type of signed
19
    digital message that attests to the identity of the
20
    possessor, according to the Court's definition?
21
         Yes, sir.
22
         And the SSH over rsync, is that another way of
23
    presenting a signed digital message that attests to the
24
    identity of the possessor, as the Court has defined that
25
    term?
```

```
1
         Yes, sir.
 2
         And -- and another example would be this SINF that
    comes down before somebody can get content. As we heard in
 3
    court, that's also digitally signed by Apple so that
 4
 5
    somebody who gets the content knows that they have that
 6
    content that's coming from Apple.
 7
         It's a signed digital message attesting to the identity
 8
    of where you're getting that movie or that book before you
9
    install it on your iPhone or iPad.
10
         Now, I'm going to switch to a different topic here.
11
         Do you recall during your original testimony you
12
    mentioned something to us, and you described something to us
13
    called the Doctrine of Equivalents?
14
         Do you recall that?
15
         Yes, sir, I recall that.
16
              MR. THOMAS: Now, if I could have up slide -- got
17
    it, Slide 12.
18
         (By Mr. Thomas) If you could, remind us what it is that
19
    this Doctrine of Equivalents is and how it -- how it gets
20
    applied in this case.
         So I had this slide from before that was summarizing
21
22
    how you have to have substantially the same function
23
    that's -- in substantially the same way to achieve
24
    substantially the same result.
25
         And how does that apply with respect to behavioral
```

```
integrity on the Apple servers?
 1
 2
              THE WITNESS: So if we could go to the next slide?
         Again, this is a review from last week. This talks
 3
    about my Doctrine of Equivalents analysis with respect to
 4
 5
    SVN over SSH, that when an iTunes Store builder is
 6
    installing software using SVN over SSH to do this install,
 7
    that it would satisfy the Doctrine of Equivalents for
 8
    behavioral integrity of that requirement of requiring a
9
    digital certificate to be required in order to install in a
10
    repository.
11
         (By Mr. Thomas) And if you could go back and just
12
    remind us, what is the -- the function of having behavioral
13
    integrity for Apple's servers and the way in which that
    function is presided -- is provided and the result that's
14
15
    achieved, according to the patent?
16
         According to the patent, which I excerpted here, again,
    the function is: Install permitted repository on a server.
17
18
         The way is: Install server software so as to require a
19
    signed message attesting to the identity of the possessor,
20
    including a measure of tamper resistance.
21
         And the result is: Only allow repository software from
22
    a trusted and authenticated source to be installed on a
23
    server.
24
         And if that function, that way, and that result is
25
    performed in the Apple system, is that sufficient, in your
```

```
1
    opinion, to meet the Court's requirement of behavioral
 2
    integrity and -- and comport with your finding of
    infringement?
 3
 4
         Yes, sir.
 5
         And you were here for Dr. Kelly's testimony, correct?
 6
         Yes, sir.
 7
         Did you hear Dr. Kelly say anything in his testimony to
 8
    challenge your Doctrine of Equivalents analysis?
 9
         I don't recall him ever mentioning the Doctrine of
    Equivalents during his testimony. I don't believe he did.
10
11
         You don't recall him saying that he disagreed with your
12
    Doctrine of Equivalents analysis at any point in his
13
    testimony?
14
         No, sir, I don't recall that. I don't -- I don't
15
    recall ever hearing that.
16
         Dr. Goodrich, you were also here for the testimony of
17
    Dr. White.
18
         Do you recall that?
19
         Yes, sir.
20
         And Dr. White expressed his opinion that the Stefik
21
    patents -- Dr. Stefik's patents-in-suit in this case are
22
    invalid because he said they were obvious -- it would have
23
    been obvious to change some things that existed before
24
    Dr. Stefik's invention to make it into his invention.
25
         Do you recall that?
```

```
1
         Yes, sir, I recall that.
 2
         What's your response to that challenge that Dr. White
    presented to the validity of Dr. Stefik's patents in this
 3
 4
    case?
 5
         I similarly did an analysis of those same documents --
 6
    that document that they call the ABYSS, that document that
 7
    was called Dyad, compared what's -- what's taught in those
    documents and what would be obvious to a person of ordinary
 8
9
    skill if they were combining them and determined it would
    not be obvious to meet every single element of the Stefik
10
11
    claims as is in those four Stefik patents.
12
              MR. THOMAS: And if I could go to Slide 18,
13
    please, Mr. Diaz.
14
         (By Mr. Thomas) So what was it that you thought was
15
    still missing, even if somebody did combine the system
16
    described by Dr. White in his ABYSS article and whatever was
    described by Dr. Tygar and Yee in that Dyad article?
17
18
         I determined, based on this analysis, that in this
19
    combined ABYSS and Dyad system, they would still -- there
20
    would be no trusted repositories because there's no
21
    behavioral integrity and no communications integrity.
22
         There would be no usage rights enforced by a
23
    repository, and then there would be no reason even to
24
    combine these two papers.
25
         Now, did the Patent Office, when they were reviewing
```

```
Dr. Stefik's patents that are involved in this case, were
 1
 2
    they aware of the Dyad article that Dr. White was describing
    for us?
 3
 4
         Yes, sir.
 5
         As we learned about how patents are structured, in that
 6
    section where you list the prior art for these patents, the
    '859 and the '072, this reference to the Dyad paper was
 7
    included in the references.
 8
9
         So what does it mean to you by the fact that the Patent
10
    Examiner in the Patent Office knew about the Dyad reference
11
    and yet still issued and gave Dr. Stefik and awarded
12
    Dr. Stefik the patents involved in this case?
13
         What that means to me is that the Patent Examiner --
14
    Examiner, who was looking at the claims of these patents --
15
    the patent application, understanding what's being taught in
    Dyad, concluded that Dyad, combining with anything that the
16
17
    Patent Examiner would have been aware of, would not be
18
    obvious to then render these patents invalid.
19
         And I see you only have the '859 and the '072 patents
20
    pictured here. Did the Patent Office and the Patent
21
    Examiner on the '007 and the '956 patents, were they also
22
    aware of this Dyad article?
23
         Yes, sir, because of something called the prosecution
24
    history, that in the history of those '956 and '007 patents,
25
    included references to earlier patents that had this
```

reference in them. 1 2 Now, sir, why is it that you think that the ABYSS system described in the article by Dr. White from 1987 3 doesn't have behavioral integrity? 4 5 Because in the ABYSS system, in order to install 6 software in that system, you were just going to be using a 7 token smart card, a physical thing that you would be using with your device or something called a MAC, M-A-C, which 8 9 isn't the Mac like an Apple computer but a message authentication code. 10 11 And neither one of these things are digital 12 certificates. They don't amount to a signed digital message 13 attesting to the identity of the possessor. 14 And what about in this article by Drs. Tygar and Yee 15 that are describing this thing called Dyad? What did you 16 conclude with respect to whether Dyad exhibited behavioral 17 integrity? 18 I also concluded that Dyad does not have behavioral 19 integrity because it explicitly talks about -- in Dyad about 20 how a system administrator would be authorized to update the 21 secure coprocessor software. 22 And then even in the glossary, it talks about how 23 that's just done with passwords. And a person of ordinary 24 skill in the art would not consider just a password as a

signed digital message, that it would be attesting to the

```
1
    identity of the possessor.
 2
         So this would not be a digital certificate way to
    update the -- the secure coprocessor software.
 3
         Now, what about whether or not either ABYSS -- the
 4
 5
    ABYSS system, as described in the article by Dr. White, or
 6
    this Dyad article, did either of those describe usage rights
 7
    that are enforced by a repository as required by
 8
    Dr. Stefik's patents and claims?
9
         No, sir, they don't.
         And could you explain to us how you reached that
10
11
    conclusion that they do not?
12
         The reason they don't is because the things that
13
    Dr. White was pointing to as usage rights was this
14
    right-to-execute or RTE that's found in the ABYSS system and
15
    how there's conditions in there and -- and -- and
16
    indications of a manner of use to run the software. But the
    difference is not in the definition of usage rights.
17
18
         But then in this other part that's found in every
19
    single one of the claims of the patents and that as -- that
20
    a repository then has to enforce those usage rights and
21
    render the content only when you're allowed to.
22
         But in this Dyad system, it's the software itself,
    which is the content, the app, like that Pac-Man app, that
23
24
    would be deciding for itself, after it's already starting to
    run, whether or not it then is allowed to continue to run
25
```

```
based on some kind of conditions.
 1
 2
         This isn't enforcement of usage rights because the app
    is already running, and so it's too late, you know, in that
 3
 4
    context.
 5
         And does Dyad add any explanation or further teaching
 6
    or further suggestion about how to modify the ABYSS system
 7
    to cure this problem?
 8
         No, sir. It just has a vague reference to how you
9
    could be using rights to execute in a general way.
10
         Dr. Goodrich, are there any other reasons why you
11
    believe that it's -- that Dr. Stefik's inventions were not
12
    obvious back in 1994 when he filed his patent applications?
13
         Has anything happened since the filing of those
14
    applications that you think sheds light on whether it really
15
    would have been obvious for those people back in 1994, just
16
    somebody of ordinary skill in the art, to do what Dr. Stefik
17
    invented?
         Yes, sir. I have some discussion of that on this next
18
19
    slide.
20
         And why do -- what are you pointing to here that's
21
    relevant to that?
22
         So what -- the things that we can understand about
23
    determining whether or not a patent is invalid is whether or
24
    not there's what's something called secondary indicia,
25
    things like praise of the inventor, praise of the patent.
```

2

3

4

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21

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23

24

```
And here's an example -- I don't know how it can get
any stronger than that, that the Patent Office itself is in
a report to Congress identifying Mark Stefik's pioneering
work at Xerox PARC in the DRM context, that it's talking
about having trusted systems that are then, you know, relied
on to follow and enforce usage rights.
     So this is very strong praise that the Patent Office
itself believed these patents were not only valid but
something that should be praised to Congress.
     Did Congress identify Dr. White or Drs. Tygar and Yee
as being the inventors or founders of any kind of DRM
scheme?
     I don't -- I don't recall ever seeing anything in this
document from the PTO to Congress mentioning ABYSS or Dyad.
     Was there any other places where Dr. Stefik was
recognized as being the originator of the technology
described in his patents?
     Yes, sir.
    Where else?
     So it's just -- this is just a collection of excerpts
of different places where Stefik's work on this trusted
system for DRM is praised, and I'm not going to go through
all these examples, but I think they speak for themselves.
     Anything else that occurred with respect to the patents
themselves, after they were issued by the Patent Office,
```

```
that you think sheds light on whether or not this really was
 1
 2
    an invention and -- not obvious and really was a valuable
    contribution that Dr. Stefik made to the field of digital
 3
 4
    rights management?
         So another kind of evidence that can be found is shown
 5
 6
    on the next slide, and that is when licenses are formed by
 7
    companies who are licensing this technology, paying money so
    that they can use the technologies shown in the license.
 8
9
    And here's some examples that I found that include licenses
10
    to the Stefik patents.
11
         And these are pretty sophisticated companies over here
    on the left that were willing and voluntarily took a license
12
    to Dr. Stefik's inventions and patents?
13
14
         Yes, sir.
15
         Okay. So what is your ultimate conclusion about
16
    Dr. White's opinion regarding whether it would have been
    obvious and whether or not there's clear and convincing
17
18
    evidence of that obviousness that's been presented in this
19
    courtroom?
20
         Yeah. My conclusions are that it would not be obvious
21
    to combine ABYSS and Dyad to render any of the Stefik
22
    patents invalid, and certainly wouldn't be meeting, in my
23
    opinion, that level of clear and convincing evidence.
24
         And then back to your opinions on infringement,
```

Dr. Goodrich.

3

4

5

6

7

8

12

14

15

16

18

22

24

```
Have your opinions with respect to whether infringement
 1
    of the asserted claims have been met in this case, has it
    changed by anything that you heard Dr. Kelly say?
         No. None of my conclusions with respect to any of the
    four Stefik patents and how they are infringed by the Apple
    accused products, none of those opinions have changed based
    on what I've heard in court over the last several days.
         And when you applied the Court's definitions for the
9
    words in the claims, without adding anything else and
10
    without adding extraneous requirements or further
11
    restrictions, what was your ultimate conclusion as to
    whether or not those claims have been infringed by Apple in
    this suit?
13
         My conclusion is that every single one of the elements
    in each of those claims has been satisfied.
         And, therefore, your conclusion with respect to
17
    infringement is what?
         That there is infringement by Apple of these patents.
19
              MR. THOMAS: Your Honor, I have no further
20
    questions for this witness, and I pass the witness.
21
              THE COURT: Cross-examination by the Defendant?
              MR. PRITIKIN: Could I have just a minute, Your
23
    Honor?
              (Pause in proceedings.)
              MR. PRITIKIN: Sorry about that, Your Honor.
```

```
1
              THE COURT: That's all right. Let's proceed.
 2
                          CROSS-EXAMINATION
    BY MR. PRITIKIN:
 3
         Good morning, Dr. Goodrich.
 4
 5
         Good morning.
 6
              MR. PRITIKIN: May we hand these up, Your Honor,
 7
    in case we need them? These are some exhibits that may be
 8
    good for --
9
              THE COURT: That's fine.
10
              MR. PRITIKIN: -- just to have some physical
11
    copies.
             Thanks.
12
              THE COURT: With all this paper, it's a good thing
13
    we grow pine trees in East Texas.
14
              All right. When you're ready, Mr. Pritikin.
15
              MR. PRITIKIN: All right. Thank you, Your Honor.
16
         (By Mr. Pritikin) Now, Dr. Goodrich, I thought I heard
17
    you say a little while ago that -- and you may have said
18
    it -- said it also when you were here earlier -- that Apple
19
    uses the secure container system for its DRM-free music.
20
         Is that the opinion you've offered in this courtroom?
         Yes, sir.
21
    Α
22
         And -- but you have yourself said in your expert report
23
    in this case that Apple's DRM-free music uses and infringes
24
    the Stefik patents, have you not, sir?
25
         Yes, sir, for that step of decrypting the content.
```

```
And, now, you didn't offer the opinion in the courtroom
 1
    that the DRM-free music infringes.
 2
         It's my understanding the DRM-free music is not being
 3
    accused of infringement, so I did not offer that opinion in
 4
 5
    the courtroom.
 6
              MR. PRITIKIN: Could we put up, Mr. Simmons, the
 7
    slide that we have that shows the claim constructions for
 8
    behavioral integrity and communications integrity?
9
         (By Mr. Pritikin) And by now, everyone's familiar with
10
    this. You've obviously seen these before, Dr. Goodrich?
11
         Yes, sir.
12
         And I think we agreed when I questioned you earlier in
13
    the trial that communications integrity and behavioral
14
    integrity are two separate and independent requirements for
15
    a repository?
16
         Yes, sir, we agree on that.
17
         And so if you pointed to something and said it was a
18
    repository and, you know, it had physical integrity and it
    had communications integrity, but it was missing behavioral
19
20
    integrity, it wouldn't be a repository?
21
         I agree with that.
22
         Now, when we look at the Court's definitions of
23
    communications integrity and behavioral integrity, we see
24
    that both of them reference digital certificates.
```

Do you see that?

```
1 A Yes, sir.
```

- 2 Q And the purpose of the communications integrity
- 3 requirement is to set up a secure channel for
- 4 | communications, correct?
- 5 A When I use the -- the -- for my analysis of
- 6 communications integrity, I have always just used the
- 7 Court's definition, so that could be one example, way of why
- 8 you'd want to do it, certainly.
- 9 Q Well, that's why you'd want to have communications
- 10 | integrity, is to make sure that you have a secure
- 11 communications channel. You're not disputing that, are you,
- 12 Dr. Goodrich?
- 13 A No. Certainly, that's one of the things you would want
- 14 for communications integrity.
- 15 Q And one way you can set up a secure communications
- 16 | channel is by having an exchange of digital certificates to
- 17 set up that channel, correct?
- 18 A There's other things that go into it, but that's one of
- 19 the steps that could be involved in such a setup.
- 20 Q Well, in fact, when you set up an SSH or an SSL
- 21 | channel, there can be an exchange of digital certificates to
- 22 | set up the channel or tunnel, correct?
- 23 A Yes, sir.
- 24 Q Now, when we look down to behavioral integrity, it's a
- 25 little different, isn't it? Because this requires the

```
1
    software to include a digital certificate, correct?
 2
         Yes, sir.
         And the Court's claim construction is that it must
 3
    include it, correct?
 4
 5
         Yes, sir.
 6
              MR. PRITIKIN: Now, could we put up the --
 7
    Slide 10 that Dr. Goodrich used in his earlier testimony in
    the case? I think it's PD-2.10, Mr. Simmons.
 8
9
         (By Mr. Pritikin) And this was your slide, correct?
10
         Yes, sir.
11
         And you showed the three integrities?
12
         Yeah. I illustrated them here with some icons, but I
13
    also gave some excerpts from the patent.
14
         And the way you illustrated communications integrity
15
    was a secure communications channel. That's what the
16
    padlocks signify here at each end, right?
17
         Yes. That's an example of -- of how you can have
18
    communications integrity.
         And once you set up the channel, you can send anything
19
20
    you want to through it?
21
         The -- the people on two ends can send messages through
22
    that secure channel that can contain any message.
23
         You could send a virus. You could send anything
```

If the two parties wanted to send viruses to each

24

25

through it, correct?

```
1
    other, they could encrypt the channel and then send viruses
 2
    to each other.
         Now, for behavioral integrity, you portray that a
 3
    little differently, and there the image or drawing you have,
 4
 5
    I take it, is intended to show that the digital certificate
 6
    is actually included in the software, correct?
 7
         According to the Court's claim construction, as I gave
 8
    with that analogy of the Christmas present.
9
              MR. PRITIKIN: And let's go to PD-2.14.
10
         (By Mr. Pritikin) This is another of your slides from
11
    your earlier testimony?
12
         Yes, sir.
13
         And this is where you're talking about communications
14
    integrity?
15
         Yes, sir.
16
         And you quoted language from the patent that says that
17
    it refers to the integrity of the communications channels
18
    between repositories, correct?
19
         Yes, sir. That's the -- the patent expounding on
20
    communications integrity.
21
              MR. PRITIKIN: Now, you can take that down,
22
    Mr. Simmons.
23
         (By Mr. Pritikin) You have yourself pointed to secure
```

communication channels like SSL or SSH as meeting the

communications integrity requirement; isn't that true, sir?

24

```
1
         Yes, sir, absolutely.
 2
              MR. PRITIKIN: And let's look at your original
 3
    Slide 33.
              I'm sorry. Let's go to Slide -- that's the wrong
 4
    one -- Slide 58.
 5
 6
          (By Mr. Pritikin) And in Slide 58, you talked about an
 7
    SSL secure communications channel, correct?
 8
    Α
         Yes, sir.
 9
         And you quoted Mr. Ward's testimony?
10
         Yes, sir.
11
         And what you said here is that the SSL -- the secure
12
    communications channel is communications integrity; is that
13
    not true?
14
       Yes, sir, it's true.
15
              MR. PRITIKIN: You can take that down,
16
    Mr. Simmons.
17
          (By Mr. Pritikin) Now, the problem you had when you
18
    were looking at the way the FairPlay software is updated is
    that you couldn't find a behavioral integrity requirement;
19
20
    isn't that true, sir?
21
    Α
         No, sir.
22
         Well --
23
         And I can explain --
24
         -- what --
25
    Α
         -- why that's not true.
```

```
THE COURT: All right. Let's be sure we're one at
 1
 2
    a time here.
              Go ahead, Mr. Pritikin.
 3
         (By Mr. Pritikin) So what you did, because you couldn't
 4
 5
    find behavioral integrity, you could not find a requirement
 6
    that the software itself include a digital certificate, you
 7
    did a little switch and you pointed to secure communications
 8
    channels to meet that requirement; isn't that true, sir?
         No, sir, that's not true. That's not a fair
9
10
    characterization of my analysis.
11
              MR. PRITIKIN: Let's take a look at your Slide 7
12
    from the -- I'm sorry -- the one that we just saw this
13
    morning, the rebuttal slide.
14
         (By Mr. Pritikin) So you created this slide?
15
         Yes, sir.
16
         And what it purports to show is the software update
17
    getting from Mr. Ward's team on to the Apple servers?
18
         Yes, sir.
19
         And the -- what you've shown here is first, you've
20
    shown an SSL connection. That's a communications channel,
    right?
21
22
         Between Ward's team and the server team.
23
         That's --
24
         Not between a customer device and the store but from
25
    Ward's team to the server team.
```

```
It is a secure communications channel that you're
 1
 2
    showing. That's what SSL is. And that's why you've drawn
    it with an arrow and with a padlock. It's a channel.
 3
 4
         It's a channel that is set up using a digital
 5
    certificate. That is why I showed it.
 6
         And then if we look at the next hop, the -- over the
 7
    SSH, that's another channel, correct, sir?
 8
         Yes, sir. It's another channel that is set up using a
9
    digital certificate.
              MR. PRITIKIN: You can take that slide down.
10
11
         (By Mr. Pritikin) So for purposes of establishing the
12
    behavioral integrity requirement that the software include a
13
    digital certificate, what you've pointed to with the
14
    FairPlay server updates are the secure channels; isn't that
15
    true, sir?
16
         I pointed to secure channels that in order to set them
17
    up to install software in a repository, you need to include
18
    a digital certificate with the software when you send it
19
    through that channel.
20
         You've pointed to the channels, correct, sir?
21
         It's the protocol that sets up the channel that I'm
22
    pointing to that has that digital certificate in it that
23
    then when you send the software, it's included like that
24
    analogy I gave of the Christmas presents that include
25
    batteries.
```

```
1 Q Now, you also offered some testimony about something
2 called the Doctrine of Equivalents this morning.
```

A Yes, sir.

- 4 Q And to be clear on that, sir, the only opinion you have
- 5 offered in this case is that there is an equivalence with
- 6 respect to the updating of the iTunes servers?
- 7 A That is correct.
- 8 Q You have not offered the jury any opinion that there
- 9 are -- somehow the secure communications channels are
- 10 equivalent to behavioral integrity for purposes of updating
- 11 | the FairPlay servers?
- 12 A No, sir. If the jury reaches that conclusion, it would
- 13 be them reaching that conclusion, not based on my testimony
- 14 | that I've given in court.
- 15 Q Well, you haven't offered that opinion in court,
- 16 correct?
- 17 A That is correct.
- 18 Q So in order to find that the behavioral integrity
- 19 requirement is satisfied, the jury must be persuaded that
- 20 | the software that is used to update the FairPlay servers
- 21 | includes a digital certificate and that that requirement is
- 22 | literally and exactly met; isn't that true, sir?
- 23 A That's the opinion I'm offering in court, and that's
- 24 what that slide was showing based on that rsync over SSH
- 25 protocol that was, for example, discussed in court.

```
Now, there was testimony about the -- the books and the
 1
 2
    movies that are put on to -- or can be installed on the
    Apple devices like iPhones and iPads, correct?
 3
 4
         Yes, sir, that's right.
 5
         And -- now, you would agree with me that a -- a movie
 6
    file is a digital work?
 7
         Yes, sir, I agree with that.
         And a movie file could contain a virus?
 8
9
         I don't know about a movie file, but certainly we heard
10
    how books could.
11
         Do you have a copy of your -- can you find your
12
    transcript -- this is from prior testimony that you gave,
13
    Dr. Goodrich, on September 15th.
         I've got three huge binders. Which one is it?
14
15
         Or if you put it up on the screen, I can see it that
16
    way as well.
         It's -- I'm told it's Volume 2, Dr. Goodrich.
17
18
         Okay. And the tab it would be?
19
         It's -- it says -- I believe it's Volume 1.
    Q
20
    Α
         Oh.
21
         And I think there's a tab there toward the back that
22
    has your name on it.
23
         It says: Goodrich trial testimony --
24
         Yes.
```

-- rebuttal?

```
Correct. And if you'd turn to Page 124 at Line 14:
 1
 2
         Question: Do you disagree with your colleague,
    Dr. Martin, when he says that a movie file can --
 3
              THE COURT: Wait a minute, Mr. Pritikin.
 4
 5
              Are you there, Dr. Goodrich?
 6
              THE WITNESS: I'm not seeing what you're referring
 7
    to. Maybe I'm --
 8
              MR. PRITIKIN: Your Honor, if I might approach, I
9
    may be able to help him.
10
              THE WITNESS: You said Page 124?
11
              MR. PRITIKIN: Yes, sir.
12
              THE WITNESS: Oh, in the -- I was in the wrong
    124.
13
14
              MR. PRITIKIN: It is the second tab from the end.
15
              THE WITNESS: Now I'm there.
16
              MR. PRITIKIN: All right.
              THE COURT: All right. Let's go.
17
18
         (By Mr. Pritikin) Page 124, do you have that
19
    Dr. Goodrich?
20
    Α
         Yes, sir.
21
         And at Line 14?
    Q
22
         Yes.
         Question: And do you disagree with your colleague,
23
24
    Dr. Martin, when he says that a movie file can include a
25
    virus?
```

```
Answer: No, sir, I don't disagree with him.
 1
 2
         Were you asked that question, and did you give that
    response under oath, sir?
 3
         Yes, sir.
 4
    Α
 5
         Now, a book file is a digital work?
 6
    Α
         Yes, sir.
 7
         And a book file could include a virus?
 8
    Α
         Yes, sir.
9
         And Dr. Stefik's solution in the threat of viruses was
10
    to require software on the repository to include a digital
11
    certificate, correct?
12
         That's one of the purposes of behavioral integrity.
13
         Now, you were aware, are you not --
14
              MR. PRITIKIN: Let's -- could we put up AX-4, the
15
    '072 patent?
16
              And let's go to Column 12, Line 17.
17
         (By Mr. Pritikin) Dr. Stefik's patent characterizes the
18
    content video and audio recordings as entertainment
19
    software, correct?
20
         Yes, sir. With "software" in quotes, because it would
21
    not be what a person of ordinary skill in the art would
22
    consider to be the repository software, that enforcement
23
    software.
24
         The patent is written to tell people and to describe
25
    the invention, correct?
```

- 1 A Yes, sir.
- 2 Q The patent is the language that's given to the United
- 3 States Patent Office to describe the invention?
- 4 A Yes, sir.
- 5 Q And Dr. Stefik, in this patent, characterized the
- 6 | content as software, correct?
- 7 A With "software" in quotes, just like "attached" was in
- 8 quotes, to mean something that is a metaphorical concept.
- 9 Q Sir, you don't disagree, do you, with Dr. Stefik's use
- 10 of the term "software" in his patents to describe audio and
- 11 video recordings?
- 12 A In this broad sense of an abstract metaphor for what
- 13 video and audio recordings include, I don't disagree.
- 14 Q Now, we can agree, can't we, that Dr. Stefik is not the
- 15 person who first came up with the idea of setting up secure
- 16 | communications channels, like SSL and SSH?
- 17 A SSL and SSH came after the Stefik patents.
- 18 | Q He did not invent the idea of secure communications
- 19 channels, did he?
- 20 A No. The idea of secure communications channels
- 21 | themselves, he didn't. It's just SSL and SSH came after
- November of 1994.
- 23 Q All right. But at the time of the invention, the idea
- 24 of secure communications channels already existed?
- 25 A Yes, sir.

```
You're not giving him credit for inventing secure
 1
 2
    communications channels, are you?
 3
         No.
         All right. And, likewise, he didn't invent the use of
 4
 5
    digital certificates?
 6
         Broadly construed, he did not invent digital
 7
    certificates.
 8
         He didn't invent behavioral integrity?
         I have not seen anything in the prior art that taught
9
10
    behavioral integrity. I believe he did invent behavioral
11
    integrity.
12
         Well, behavioral integrity to the extent it requires
13
    software to include digital certificates, people weren't
    including digital certificates in software before 1994. Is
14
15
    that your testimony, Dr. Goodrich?
16
         My testimony is that -- and I've studied a lot of the
    prior art. I was asked to study a lot of those accused
17
18
    prior art references, besides just Dyad and ABYSS, to see if
19
    any of them taught behavioral integrity the way the Court
20
    has defined that term, which is requiring a software to
21
    include a digital certificate in order to be installed in
22
    the repository. And none of them have that behavioral
23
    integrity to -- all of the ones I analyzed.
24
         Did he invent the idea of putting digital certificates
```

in software?

```
1
         No, he did not invent that component of behavioral
 2
    integrity.
         Did he come up with -- was he the first person to come
 3
    up with the idea of requiring software to include a digital
 4
 5
    certificate?
 6
         Based on my analysis, he was.
 7
         For other purposes?
 8
         I'm not sure I understand the question.
9
         All right. We can agree, at least, that he is not the
    person who invented the idea of putting digital certificates
10
11
    into software?
12
         Yes, sir, we can agree on that.
13
         Now, using digital certificates to check software
14
    before it's installed was a well-known technique before
15
    Dr. Stefik's patents?
16
         It was known before the Stefik patents. The part
17
    that's new is this requiring, as the Court has defined --
18
              THE COURT: Dr. Goodrich, limit your answers to
19
    the questions asked. The Plaintiff can address anything
20
    they want to on redirect.
21
              THE WITNESS: Yes, Your Honor.
22
              THE COURT: Go ahead, Mr. Pritikin.
23
              MR. PRITIKIN: Thank you, Your Honor.
24
         (By Mr. Pritikin) Using digital certificates to check
```

software before it's installed was a well-known technique

25

```
before Dr. Stefik's patents, correct, sir?
 1
 2
         It was known, yes, sir.
 3
         And, in fact, you cited things in your own slides and
 4
    your -- your expert report showing that it was a well-known
 5
    technique in computer science?
 6
         I'm not -- I'm not sure what you're referring to. I'm
 7
    sorry.
 8
         The Denning textbook, for example?
9
         Oh, the Denning textbook talks about digital
10
    certificates and using them for various purposes.
11
         And that was published in 1983?
12
         Yes, sir.
13
         In fact, Professor Denning had recommended digitally
14
    signing all software you run on a computer might be a good
15
    idea, didn't she?
16
         I think so, with respect to digital signatures.
17
         Now --
18
         Which is different --
19
         Could we --
    Q
20
         -- than digital certificate.
21
              MR. PRITIKIN: Your Honor, it's easier if I ask
22
    the questions and get the answers --
23
              THE COURT: Yes, it is.
24
              MR. PRITIKIN: -- rather than having things
25
    volunteered.
```

```
THE COURT: Well, limit your answers to the
 1
 2
    questions asked. Wait until the question is asked and then
    respond. And then when the answer is finished, ask the next
 3
    question. These are not difficult rules. Let's follow
 4
 5
    them.
 6
              MR. PRITIKIN: Can we put up AX-0385?
 7
         (By Mr. Pritikin) And do you recognize this as an
 8
    article by Ralph Merkle?
9
         Yes, sir.
    Α
10
         And he was someone who also worked at some point in
11
    time with Dr. Stefik at Xerox?
12
         That's my understanding.
13
         And do you see at the bottom, this is an article that
    goes all the way back to 1980, an IEEE article?
14
15
         Yes, sir.
16
         And in this article -- you're familiar with the
    article, aren't you, Dr. Goodrich?
17
18
         Yes, sir.
19
              MR. PRITIKIN: And let's go over to Page 131.
20
         (By Mr. Pritikin) One of the things he wrote, that it
21
    would be clearly undesirable for any node to start executing
22
    the wrong software.
23
         And he goes on to say: On the other hand, it's very
24
    desirable to send updates to the nodes over the network
25
    itself.
```

```
1
         And he says -- said in 1980: The obvious solution is
 2
    for updates to be digitally signed by an appropriate network
 3
    administrator and for the nodes to check the digital
 4
    signature prior to executing them.
 5
         You're aware that this is something that was published
    by Dr. Merkle in 1980, some 14 years before the Stefik
 6
 7
    patents?
 8
         Yes, sir, I'm aware of that.
9
              MR. PRITIKIN: We can take that down.
10
         (By Mr. Pritikin) Now, earlier this morning, there was
11
    some testimony about the usage rights. And to be clear on
12
    this, usage rights have to include manners of use, correct?
13
         They have to include indications of manners of use,
14
    ves, sir.
15
         So if they only had conditions in them, it wouldn't
16
    meet the Court's definition of a usage right. There have to
17
    be manners of use as well, right?
18
         There has to be some indication of a manner of use.
         And the manners of use, two in particular that you've
19
20
    identified, were the "isRental" and the "kind" fields.
21
         Do you recall that?
22
         I identified those as indications of manners of use,
23
    yes, sir.
24
         And I thought I heard you say this morning -- and I
25
    want to be clear on this, Dr. Goodrich -- I thought I heard
```

```
you say you -- you agree that in the Stefik patents, what
 1
 2
    you identify as the manner of use has to be enforced by the
    repository?
 3
         I think you misunderstood me.
 4
 5
         Well, let me ask the question this way: I thought I
 6
    heard you say that in the Apple system, the iTunes software
 7
    uses the "kind" field to present movies and books that the
    user is allowed to watch.
 8
9
         Do you recall that testimony?
10
         Yes, sir.
11
         And when you used the word "present the movies and
12
    books," I take it what you were referring to was the same
13
    thing that Mr. Fasoli referred to yesterday. That's when
    they're displayed so that you can go in and see which movies
14
15
    and books you have.
16
         I think that's accurate, although -- except I don't --
17
    I'm not sure it was yesterday.
18
         Whenever he testified.
19
         Yeah.
20
         All right.
    Q
21
              MR. PRITIKIN: Let's put up PX-1030.
22
         (By Mr. Pritikin) And you see that this is a -- a
23
    contract between Apple and Sony?
24
    Α
         Yes, sir.
25
         And you understand that Sony is one of the content
```

```
1
    providers that allows its movies to be distributed through
 2
    Apple?
         That's my understanding.
 3
         And you've seen this? You're familiar with this
 4
 5
    agreement?
 6
         Yes, sir.
 7
         In fact, it's one of the things you considered in
 8
    reaching your opinions in the case?
9
         That is correct, sir.
         Now, you're aware, aren't you, that the -- some of the
10
11
    content providers like Sony actually have provisions in the
12
    contracts that involve the way Apple handles the keys that
13
    are used to unlock the content and allow the viewing of --
14
    of the content?
15
         Yes, sir.
16
         As I cited in my direct testimony, there's these things
    that they call the usage rights, the security solutions, and
17
18
    that they had a number of different conditions in them.
19
              MR. PRITIKIN: Let's look at the bottom of
20
    Page 27.
21
         (By Mr. Pritikin) Now, the contract with Sony
22
    explicitly says that account keys -- you understand what an
    account key is? That's -- you need an account key to be
23
24
    able to watch a -- a movie or a book that you've purchased,
25
    right?
```

```
Yes, sir.
 1
 2
         And the contract with Sony says: Account keys may not
    be transferred with the encrypted movie file but must
 3
 4
    instead be reissued by the online service each time a
 5
    transfer occurs.
 6
         Were you aware, sir, in forming your opinions in this
 7
    case, that the contract with Sony actually prohibited --
 8
    prohibited Apple from transferring the account keys with the
9
    encrypted movie file in this way, sir?
10
         Yes, sir, I believe I recall that.
11
              MR. PRITIKIN: You can take that down.
12
         (By Mr. Pritikin) The -- now, you understand that when
13
    Dr. White testified, that he said that he believes that what
14
    is in the Stefik patents would have been obvious to a person
15
    of ordinary skill in the art who read the ABYSS and the Dyad
16
    articles, correct?
17
         Yes, sir. I understand that was his testimony.
18
         And there's no dispute that they're both prior art to
19
    the Stefik patents, right?
20
         I'm not disputing that.
21
         And, now, did I hear you say earlier this morning you
22
    didn't think that a person of ordinary skill in the field at
23
    the time would have thought to combine what is in these two
24
    publications, these two articles?
25
         Yes, sir, that's correct.
```

```
1 Q Now, you've heard the phrase "patent lawyers" used
2 sometimes about a motivation to combine?
```

- A I have heard that, yes, sir.
- 4 Q And when you're looking at two separate things that are
- 5 in the prior art and trying to figure out whether a patent
- 6 | would have been obvious, sometimes patent lawyers talk about
- 7 | whether there's a motivation to put them together?
- 8 A Indeed, I've heard that.
- 9 Q Now, you would agree with me, wouldn't you, that one
- 10 | reason a skilled engineer would think about the ABYSS and
- 11 | the Dyad papers together is that the Dyad paper talks about
- 12 Dr. White's earlier ABYSS paper?
- 13 A Yes, sir, refers to it as being primitive.
- 14 Q The one paper talks about the other?
- 15 A Yes, sir.

- 16 Q And you heard Dr. White's testimony that it takes what
- 17 | is in the White paper and expands on it?
- 18 A I did not agree with that testimony, based on my
- 19 reading of the Dyad paper.
- 20 Q Now, you agree that Dr. White's earlier ABYSS paper
- 21 | uses something called MAC or message authentication codes?
- 22 A Yes, sir, I agree with that.
- 23 Q And you've testified that method -- that MACs or
- 24 | message authentication codes are not the same as digital
- 25 certificates; isn't that true?

- 1 A Yes, sir, that's correct.
- 2 Q And -- but the use of MACs comes up again in your
- 3 infringement analysis, doesn't it?
- 4 A Yes, sir.
- 5 Q And in analyzing infringement, you turned around and
- 6 said that MACs or message authentication codes that are used
- 7 to set up SSH secure channels are digital certificates,
- 8 didn't you, sir?
- 9 A No, sir. That's not a fair characterization of my
- 10 testimony.
- 11 Q You said that they are equivalent to the use of digital
- 12 | certificates, did you not, sir?
- 13 A No, sir. That's still not a fair characterization of
- 14 my testimony.
- 15 Q You pointed to the message authentication codes that
- 16 | are used in setting up an SSH protocol as a part of your
- 17 | infringement analysis to show behavioral integrity?
- 18 A Yes, sir, they achieved that -- that component of
- 19 tamper resistance that I included in my Doctrine of
- 20 Equivalents analysis.
- 21 Q You pointed to method -- message authentication codes
- 22 | to help show equivalence to digital certificates -- to
- 23 behavioral integrity, correct, sir?
- 24 A Yes, sir.
- 25 Q And yet you said that the prior art that used message

- 1 authentication codes did not teach behavioral integrity?
- 2 A Yes, sir.
- 3 Q That was your opinion, wasn't it, sir?
- 4 A Yes, sir, that's absolutely correct.
- 5 Q Now, you heard the testimony from Mr. Fasoli that in
- 6 the Apple system, only a small piece of the encrypted movie
- 7 | file is decrypted at one time, correct?
- 8 A Yes, sir, I recall that.
- 9 Q And you don't have any reason to disagree with that?
- 10 A No, sir, I don't disagree with that.
- 11 Q So what's in the clear is just the little segment
- 12 | that's being viewed at one time?
- 13 A I'm not even sure it's in the clear really. It's being
- 14 stored in protected memory even at that time.
- 15 Q Now, this technique of decrypting on the fly, this is
- 16 | not something that Dr. Stefik invented, is it?
- 17 A No, sir. It's even in this Dyad reference that
- 18 | Dr. White talked about, which has been characterized as a
- 19 trusted system approach.
- 20 Q It was disclosed; it was known; it was in the public
- 21 | realm before Dr. Stefik filed for his patents; is that
- 22 | correct, sir?
- 23 A Yes, sir. Dyad calls it crypto-paging.
- 24 Q Now, you gave some testimony about what you said was
- 25 | the Patent Office praising what Dr. Stefik had had done, and

```
1
    you cited some other sources on that same slide. One of
 2
    them was an employee at Microsoft.
 3
         Do you recall -- recall that, Dr. Goodrich?
 4
    Α
         You mean those quotes --
 5
         Yes.
 6
         -- about praise? Yes, sir.
 7
         At the time, Microsoft was a part owner of
 8
    ContentGuard, correct?
9
         I don't recall the timing just sitting here now.
10
         You're aware that Microsoft was a part owner of
11
    ContentGuard at one time?
         At one time, yes, sir, I'm aware of that.
12
13
         And did you hear the deposition testimony that was
14
    played in court of Eddie Chen?
15
         Yes, sir, I heard that.
16
         And Dr. Chen was at one time the acting CEO of
    ContentGuard?
17
18
         Yes, sir. I heard that, too.
19
         And do you recall his testimony that around the time
20
    they decided that they were going to try to license the
21
    patents, there was a plan at ContentGuard to promote
22
    Dr. Stefik as the Father of DRM?
23
         Yes, sir, I recall that.
24
         Now, turning to the Patent Office document that you
```

testified about --

```
1
              MR. PRITIKIN: Can we put up PX-129?
 2
              And could we turn over to Page 8?
 3
              Let's go back to Page 7.
         (By Mr. Pritikin) And in context, this report that was
 4
 5
    prepared by the Patent Office for Congress had a whole
 6
    section on digital rights management systems, didn't it?
 7
         Yes, sir, that's correct.
 8
         And the section --
    0
9
              MR. PRITIKIN: If you go down to the next page.
         (By Mr. Pritikin) Page 8, under trusted computing, that
10
11
    was just one section on DRM systems, right?
12
         Yes, sir, that's correct.
13
         And it was in this section on trusted computing that
14
    there was mention of Dr. Stefik, correct?
15
         Yes, sir.
16
              MR. PRITIKIN: Let's turn over to Section 4 on
17
    Page 9 and look at the paragraph under types of DRM systems.
18
         (By Mr. Pritikin) And what the report said is that
19
    "there is a wide range of DRM options that are available in
20
    the marketplace today, probably reflecting the fact that no
21
    single technology or solution can fulfill the remarkably
22
    diverse requirements of the digital marketplace."
23
         Do you see that language?
24
         Yes, sir, I see that.
25
         And you have no reason to disagree with that, do you,
```

```
1
    Dr. Goodrich?
 2
         No, sir, not at the time that this report was written.
 3
              MR. PRITIKIN: I have no further questions, Your
 4
    Honor. I pass the witness.
 5
              THE COURT: Redirect, Mr. Thomas?
              MR. THOMAS: Yes, Your Honor.
 6
 7
                        REDIRECT EXAMINATION
    BY MR. THOMAS:
 8
9
         Dr. Goodrich, is there anything in the Court's claim
    constructions or anywhere else in the claims of the Stefik
10
11
    patents that requires the three integrities we've been
12
    talking about to be maintained at all times?
13
         No, sir.
14
         You were asked some questions about SSL and SSH.
15
         Do you recall that?
16
         Yes, sir, I recall that.
17
         Is it possible to use those protocols, SSL and SSH, to
18
    accomplish both communications integrity and behavioral
19
    integrity?
20
         Yes, sir, absolutely.
21
         Now, could you explain why -- why is it that they can
22
    both be used to perform the requirements of those two
23
    integrities?
24
         The reason is, is that when you're setting up this
25
    communications channel and you want to do it securely, there
```

```
is a digital certificate involved to create the secure
 1
 2
    channel. And then those certificates are signed digital
    messages attesting to the identity of the parties performing
 3
 4
    those communications.
         If it's between the store and a customer's device, that
 5
 6
    would be for communications integrity with respect to a
 7
    repository. But if it's from a software installer to a
 8
    server, that digital certificate would be attesting to the
9
    identity of the installer so that the repository on the
10
    other side would know this is a trusted entity who's allowed
11
    to install software on that repository.
12
         So it's the same protocol, but being performed in
    different ways by different entities.
13
14
         You recall being asked a couple of questions just a
15
    moment ago by Mr. Pritikin about viruses being placed in
16
    movies files or book files?
17
         Do you recall that?
18
         Yes, sir.
19
         Does Dr. Stefik's inventions require a hundred percent
20
    certainty that his patented system can never be hacked?
21
         No, sir. And if -- if -- if we recall, I talked about
22
    those -- that Table 2 that had those levels of security that
23
    started zero, went up.
24
         By Level 2, you would have something that would meet --
25
    be meeting the Court's claim -- the definitions for
```

```
repository, but then it keeps going, 3, 4, 5, all the way up
 1
 2
    to 10.
 3
         But if we go back to just that 2 where you would have a
    repository, it said in there that you could hack it with
 4
 5
    special tools or special knowledge.
 6
         And even in court, we heard how special tools could be
 7
    used to thwart the kind of things that Apple does. So that
    alone, just because something can be hacked, doesn't
 8
9
    suddenly mean it's not a repository.
              MR. THOMAS: Mr. Diaz, if I may have, please, the
10
11
    '859 patent, and I believe it might be around Column --
12
    towards the bottom of Column 4, but there's a table that
13
    says "security levels." I was wrong on 4.
         Are you referring to Table 2?
14
15
         (By Mr. Thomas) Yes. Table 2.
16
         Do you happen to remember what column that's in,
17
    Doctor?
18
         Just off the top of my head, I don't remember the
19
    column number.
20
         There it is.
              MR. THOMAS: And if you could go to -- I think
21
22
    it's in the next column. It says: Security Level 2.
23
         (By Mr. Thomas) And what was it you were referring to
24
    here with respect to what's called basic security,
25
    Dr. Goodrich?
```

```
1
         And this is in each of the Stefik patents; is that
 2
    correct?
 3
         Yes, sir. This Table 2 is in all the patents.
 4
         So it starts out by saying: Like the previous class
 5
    which the previous class was saying you have to use
 6
    encryption.
 7
         And this says: Except that special tools and knowledge
 8
    are required to compromise the programming, the contents of
9
    the repository or the state of the clock.
         So it's saying now we're going to a next level that's
10
11
    not bulletproof, but you'll at least need special tools and
12
    knowledge in order to compromise it.
13
         And that would still constitute something that was
    using and practicing Dr. Stefik's claimed and patented
14
15
    inventions; is that correct?
16
         Yes, sir. Because it's still a person of ordinary
    skill reading this description would understand it would
17
18
    have those three integrities as required by the Court.
19
         Mr. Pritikin asked you a moment ago a couple of
20
    questions about an article by, I believe, a Ms. Denning.
21
         Do you recall that?
22
         It was her book, yes, sir.
23
         And also an article by a Ralph Merkle.
24
         Do you recall that?
```

Α

Yes, sir.

```
1 Q Did Dr. White or anybody else in this court allege that
```

- 2 either of those publications invalidated any of Dr. Stefik's
- 3 | claims or patents?
- 4 A No, sir, they didn't.
- 5 Q Did the claims in Dr. Stefik's patents, applying the
- 6 Court's claim constructions, did they require that there be
- 7 | more than one manner of use that the system can allow?
- 8 A No, sir, they don't.
- 9 Q How many manners of use do there have to be to meet the
- 10 | Court's claim constructions?
- 11 A There has to be at least one.
- 12 | Q So you were here for Dr. White's testimony regarding
- 13 his opinion that the patents were invalid.
- 14 Do you recall?
- 15 A Yes, sir.
- 16 Q Do you recall he, in answering my questions, explained
- 17 | that there were dozens, if not hundreds, of skilled
- 18 researchers working in the field of DRM before Dr. Stefik
- 19 came up with his invention?
- 20 A Yes, sir, I recall that testimony.
- 21 | Q And do you recall that Dr. White wasn't able to point
- 22 | to a -- one single reference where somebody had described
- 23 | the same thing as Dr. Stefik invented, correct?
- 24 A Yes, sir, I recall that.
- 25 Q What does it tell you that there were that many really

```
smart, skilled people trying to solve the same problems that
 1
 2
    Dr. Stefik was trying to solve but that didn't come to the
    same solution that Dr. Stefik did that he described in his
 3
 4
    patents? What does that tell you about the obviousness of
    Dr. Stefik's invention?
 5
 6
              MR. PRITIKIN:
                             Objection; leading, Your Honor.
 7
              THE COURT: Sustained.
 8
         (By Mr. Thomas) What does the fact that there were
    0
9
    these many people working in the field have on your opinion
    with regard to obviousness, if anything?
10
11
         It -- it is another indication that this would not be
12
    obvious, to take two things that were known, combine them in
13
    a way that then would be rendering all the elements of the
14
    claims obvious.
15
         And why is that?
16
         Because those people there didn't have hindsight the
17
    way we do now to be able to look back and perhaps even use
18
    the claims of the patent as a roadmap to say, you know, how
19
    would I do this? Well, I could just stick in Merkle. How
20
    would I do that? Well, I would stick in Denning. And then
21
    I would do ABYSS and -- and all these things.
22
         And even under that analysis, I still determine
23
    behavioral integrity is still missing, even if you do that
24
    hindsight analysis. But even with that approach, if you
25
    start to say now let's try to not be -- using hindsight, go
```

```
1
    back in time and actually ask the question in the real
 2
    world.
 3
              In fact, I had this bullet on one of my slides, is
    that these things were never combined in the real world to
 4
 5
    render anything that would be satisfying every single one of
    those claims.
 6
              I -- I presume that if Dr. White had found
 7
 8
    something like that, he would have given an opinion that all
 9
    the claims were anticipated by a single reference, but he
10
    did not offer that opinion.
11
              MR. THOMAS: Your Honor, I have no further
12
    questions, and I pass the witness.
              THE COURT: All right. Additional cross,
13
14
    Mr. Pritikin?
15
              MR. PRITIKIN: Nothing further from me, Your
16
    Honor. I pass the witness.
17
              THE COURT: All right. You may step down,
18
    Dr. Goodrich.
19
              THE WITNESS: Thank you, Your Honor.
20
              MR. THOMAS: May Dr. Goodrich be excused, Your
21
    Honor?
22
              THE COURT: Any objection?
23
              MR. PRITIKIN: No, sir.
24
              THE COURT: You're excused, Dr. Goodrich.
25
              THE WITNESS: Thank you, Your Honor.
```

```
THE COURT: Plaintiff, do you have additional
 1
 2
    rebuttal witnesses?
 3
              MR. THOMAS: We do not, Your Honor. Plaintiff
 4
    rests its case.
 5
              THE COURT: All right. Both sides rest and close
 6
    subject to final instructions and closing arguments,
 7
    correct?
 8
              MR. THOMAS: Yes, Your Honor.
9
              MR. PRITIKIN: Yes, Your Honor.
10
              THE COURT: All right. Ladies and gentlemen of
11
    the jury, you have now heard all the evidence in this case.
12
    There are additional things the Court must take up with
13
    counsel outside of your presence.
14
              And the good news is that you only have to stay
15
    here a half a day today. I'm going to send you home. And
16
    what you do with the other half of the day is strictly up to
    you, as long as you don't discuss this case with anybody.
17
18
              We will be working over several things that don't
19
    directly affect you this afternoon. I will want you back in
20
    the morning. I believe in the morning we'll be in a
21
    position to let the Court give you my final instructions,
22
    hear the closing arguments from counsel, after which I'll
23
    then direct that you retire to the jury room and deliberate
24
    on your verdict.
25
              At that time, but only at that time, it will be
```

```
your duty to discuss all the evidence you've heard among
 1
 2
    each other and come to a unanimous decision on your verdict.
              But until that time that I send you into the jury
 3
    room to formally deliberate, you are not to discuss the
 4
 5
    evidence, the case, or anything about this process with
 6
    anyone, including each other.
 7
              That -- that instruction has been important from
    the beginning. It's even more important as we get to the
 8
9
    very end of things. So please bear that in mind as you're
    free and on your own this afternoon.
10
11
              I'd like you here in the morning at 9:00 o'clock.
12
    I think we can start a little later. I cannot promise you
13
    that things will be ready to go at 9:01. You may have to
14
    wait on me. I may have to wait on you. It's my best
15
    approximation. Some of the things I'm doing are not things
16
    that I can give you an exact time limit on.
17
              All of that said, I'll ask you to leave your
18
    notebooks closed and on the table in the jury room as you
19
    leave the courthouse. I remind you of all my other
20
    instructions.
              And if we'll -- if you'll travel safely and have a
21
22
    good afternoon, we will see you here tomorrow morning
23
    assembled in the jury room at 9:00 a.m.
24
              You're excused at this time.
25
              COURT SECURITY OFFICER: All rise for the jury.
```

(Jury out.) 1 2 THE COURT: Please be seated. 3 Counsel, as I indicated by email communication yesterday evening, I will expect your motions under 4 5 Rule 50(a) to be presented in written form and filed at the 6 time specified later today. I will consider those 7 overnight, and I anticipate giving you rulings from the 8 bench first thing in the morning. 9 I also plan to meet this afternoon, starting at 1:15, with those counsel that will be involved in discussing 10 11 the final jury instructions and the verdict form. 12 I know both Mr. Baxter and Mr. Pritikin are going 13 to present the closing arguments for the respective sides. They are welcome to join us, but they are not required to 14 15 join us. If they would rather spend that time working on 16 their closing arguments, that's perfectly acceptable. 17 Those of you that are not involved in the process 18 do not need to attend, but I need those counsel from both 19 Plaintiff and Defendant that are participating in the charge 20 preparation to meet with me in chambers at 1:15. 21 I'll conduct an informal charge conference 22 reviewing the submitted proposals from both sides, 23 discussing the merits of those, hearing argument, and fully 24 exploring the competing proposals with regard to both the 25 final jury instructions and the verdict form.

Having considered all that after the informal 1 2 charge conference, the Court will assemble what it believes to be the appropriate result of that process and the final 3 jury instructions and verdict form to be used. 4 5 I'll deliver that to counsel, and hopefully later 6 today, we'll have had enough time for that to be reviewed 7 that I can then conduct a formal charge conference on the record where either side or both sides will be given an 8 9 opportunity to make any objections for record purposes to 10 the resulting charge and verdict form. 11 If we can accomplish that today among us, counsel, 12 then I can give you immediate and ultimate rulings on your 13 50(a) motions from the bench in the morning and then proceed 14 to bring in the jury, give them the final jury instructions, 15 hear the closing arguments, and let them then retire to 16 deliberate. 17 If all of that goes as planned, we should have the 18 case in the jury's hand by or slightly before lunch 19 tomorrow. That's the Court's plan. That's the timetable 20 I'm working with. 21 We're going to recess, and I'll see those involved 22 in the informal charge conference at 1:15. 23 Are there questions from either side? 24 MR. PRITIKIN: Yes, Your Honor. I would request 25 that we be allowed at this point to release the rest of the

```
1
    witnesses?
 2
              MR. THOMAS: No objection, Your Honor.
 3
               THE COURT: All the witnesses in the case are
    hereby released.
 4
 5
              Anything else from the Plaintiff?
              MR. BAXTER: No, Your Honor.
 6
 7
              THE COURT: Anything else from the Defendant?
              MR. PRITIKIN: No, Your Honor.
 8
 9
              THE COURT: I would like to see Mr. Baxter and
10
    Mr. Pritikin in chambers for about five minutes as soon as I
11
    recess.
12
               Otherwise, we stand in recess until 1:15 for the
13
    informal charge conference.
14
              COURT SECURITY OFFICER: All rise.
15
               (Lunch recess.)
16
17
18
19
20
21
22
23
24
25
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1
 2
                             CERTIFICATION
 3
 4
               I HEREBY CERTIFY that the foregoing is a correct
 5
    transcript from the stenographic notes of the proceedings in
    the above-entitled matter to the best of my ability.
 6
 7
 8
 9
    /S/Shelly Holmes
                                      11/19/15
    SHELLY HOLMES, CSR, TCRR
                                     Date
    Official Court Reporter
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    State of Texas No. 7804
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    Expiration Date: 12/31/16
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